

The Boston Medical and Surgical Journal

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Ether Day at the Massachusetts General Hospital

OPENING ADDRESS BY DR. HENRY P. WALCOTT, PRESIDENT MASSACHUSETTS GENERAL HOSPITAL CORPORATION.

LADIES AND GENTLEMEN: The first patient was admitted to this hospital on the third of September, 1821. It has seemed to us that no better day for the commemoration of our centennial could be taken than that of our annual festival, a festival which we hold in honor of the supreme event in the history of the hospital, the day upon which in the room in the oldest building in this group of buildings, sulphuric ether was used publicly for the first time to produce surgical anesthesia. On the walls of that room which remain unchanged (and so far as the accidents of time permit will be always unchanged, for it is a shrine in this hospital and should be a shrine to the medical profession and to the world), the simple, truthful and sufficient inscription tells, that on the sixteenth of October, 1846, William Thomas Green Morton administered ether to a patient who was to undergo a surgical operation, that John C. Warren performed the operation, and that the patient was Gilbert Abbott. That Abbott when he recovered, declared he had felt no pain. Pain then was abolished; it has no greater existence than the tissue of a dream. The news of this discov-

ery went from that room throughout the world and a new era in surgery began. This hospital has always awarded to Morton the foremost place in the great discovery, and it is a source of great satisfaction to us that a larger constituency than ours has rendered a verdict, and that Morton's name now has a place among the few honored names of men who have deserved well of their country.

The hospital of that day thus established was not a large affair. It served the interests of the community, serving them so well that it was generously supported. How slight, however, the burden it imposed upon the public, may be shown by the fact which I find in the records of Mr. Josiah Quincy in 1832; when he met with some objection to the charge which the trustees expected paying patients to meet, he produced a group of figures showing that the weekly cost of a house patient at the Massachusetts General Hospital at that date amounted to \$4.62 a week. In the last report of the trustees of this hospital, the cost of a house patient is stated to be \$5.70 per day, and not a cent of that money is wasted.

The expense of maintenance in the hospital has many times outrun the high cost of living. This community has always generously supported the hospital. Our appeals have been met and one object of this meeting is to set before you clearly what the activities of this hospital are, and what its needs of necessity must be. There will never be a time, I hope, when a great charity will be able to say, "We appealed to the public for aid, but in vain."

This hospital extends its benefits to districts far outside the Metropolitan area. In the beginning it served a homogeneous population. How cosmopolitan it has become is pleasantly shown by the fact just communicated to me by the resident physician, that there has been established in the hospital an Italian free bed fund of \$10,000 which we owe largely to the exertions of Dr. Balboni, a member of our staff.

In 1810 an appeal was issued to the public in aid of a call for funds for the benefit of a General Hospital. That appeal, signed by James Jackson and John C. Warren, is a simple document. It appealed not only to the humanitarian interests of the community, but it also contained a statement regarding the place which should be occupied by a General Hospital, and it is only now that we have reached the limit as set forth in that statement.

It is useless to say much about James Jackson. His gracious memory still lingers here. He was a visiting physician of this hospital, a teacher in the medical school, a prominent practitioner in the city of Boston. He gave dignity to his calling.

The first speaker this afternoon served also in this hospital. He was Jackson Professor of Medicine in the Medical School, and has earned his place in the confidence and affection of the public. The announcement that he is Professor Emeritus may seem to indicate that he has retired from activities in medicine; but, such men do not retire—he has simply changed the field of his operation. He may have ceased to be an attendant upon the sick, but he still labors in the unselfish interests of preventive medicine. It is useless for me to say more of Dr. Frederick C. Shattuck, he can always speak for himself.

ETHER DAY ADDRESS.

OCTOBER 18, 1921.

By FREDERICK C. SHATTUCK, M.D., BOSTON.

"For a thousand years in Thy sight are but as yesterday when it is past, and as a watch in the night."

To us, however, creatures of a day, obsessed by our sensory consciousness, and in a country as young as the United States, a hundred years looms large in the fog of time, and seems to serve as a natural milestone on the path of human progress.

The Massachusetts General Hospital has entered on the second century of its life, and has a past of which it may well be proud. It is very fitting that we gather here to celebrate at once the centennial of the Hospital and the diamond jubilee of anaesthesia. September 3-d, 1821, the first patient was admitted to the Massachusetts General Hospital. Up to January 1st, 1822, there were eighteen admissions, one hundred twenty-two during the year 1822.

I have been unable to find out with certainty the number of beds in 1821. It was probably sixty. In 1823, when the wings were finished, it was ninety-three. Admissions to the wards in 1920 were 6,185, 25,302 to the Out-Patient Department.

The Out-Patient Service was started October 16, 1846, the same day that the first operation was done under ether. The number of beds today is four hundred and fifty-six, including one hundred in the Phillips House. So much for cold statistics.

Let us think for just a passing moment of the tragedy, relieved now and then by some measure of comedy; of the pain and sorrow; of the joy and gladness which these walls have seen; of health and usefulness restored or prolonged; of home relieved from the burden of sickness! But I must condense one hundred years of medicine into twenty minutes. I shall, however, take time, even steal it, if necessary, to allude to the debt which the Hospital owes to those who have served it as trustees, always representative of the best citizenship of the community. Their wisdom and sense of duty have been a stimulus and unfailing support to the determination of the professional staff to keep the Hospital in the forefront of the battle against disease and the human suffering which ensues therein.

From the large number of Physicians to the Hospital—happily for you it falls on Dr. Cushing to tell the story of the surgeons and their deeds—it is possible here and now to mention only a few whose names seem to me of special significance.

James Jackson, 1817 to 1837, with John C. Warren, co-founder of the Hospital, commanded universal respect and confidence. Pre-eminent in wisdom and character, he clearly saw the importance, nay the necessity, for a first-rate hospital to combine medical teaching with the care of the patients. He first, in 1822, described alcoholic neuritis; in 1855, "painful tumor near the cecum," now known as appendicitis, and in the same year published the medical classic, "Letters to a Young Physician."

Walter Channing, 1821 to 1839, in 1843 published "Notes on Anhaemia" in special connection with the puerperal state. Therein are described cases of that grave form of anaemia we now call pernicious. Today it is easy of recognition, though its origin and cure are still beyond our ken.

John Barnard Swett Jackson, 1840 to 1864, single-minded, modest almost to a fault, a rarely accurate observer, devoted, was one of the foremost gross pathologists of his, or, indeed, of any day. He was Curator of the Cabinet of the Boston Society for Medical Improvement, and also of the Warren Museum. His catalogue of the former Cabinet, published in 1847, was characterized by a distinguished

Philadelphia professor as "the most valuable contribution to pathological anatomy made up to that date in this country."

Jacob Bigelow, 1836 to 1855, was possessed of and by probably at once the broadest and keenest intellect in the history of New England medicine. He was a pupil of Benjamin Rush, whom he quotes as saying, "We can have no reliance on nature, gentlemen; we must turn her out of doors in our practice and substitute for her efficient art." The pupil by his *Essay on Self-limited Diseases*, dealt a staggering blow to the heroic treatment of the day, to the unholy trinity,—bleeding, purging and puking. Of this oration, delivered before the Massachusetts Medical Society, 1835, Dr. Holmes said, "This remarkable essay has probably had more influence on medical practice in America than any similar brief treatise, we might say, than any work ever published in this country."

Mt. Auburn, the first rural cemetery in this country, was a child of his brain, and his interest in its welfare was maintained through his life.

In 1829 he published a 500-page octavo on the "Elements of Technology," and Worcester, in his dictionary, gives Dr. Bigelow as authority for the word "technology." Dr. Bigelow himself claims only that he revived and reapplied the word, which is now familiar to us in the great Massachusetts Institute of Technology, to the founding of which his writings and teachings notably contributed. He was, until that office was abolished, vice-president, and delivered the address at the opening of the new building, in 1865.

Oliver Wendell Holmes, 1846 to 1849, high as he ranks as poet and wit, ranks yet higher for his clarion cry on the contagiousness of puerperal fever. It is more pleasing to think of the lives which he was thereby the means of saving than to recall the storm of abuse which fell upon him from some leaders in the profession.

It is noteworthy that Channing's paper on Anhaemia, Jacob Bigelow's on Self-limited Diseases, and Holmes' on Puerperal Fever, were all published in the *New England Quarterly Journal of Medicine and Surgery*, and in the same year, 1842.

John Ware was Visiting Physician only for one year, 1839. He was a foremost practitioner of his day, as high minded as sagacious. He was the author of notable papers on Delirium Tremens and Croup.

Henry Ingersoll Bowditch, 1846 to 1864, fearless, public spirited, in conjunction with Morrill Wyman was a pioneer in the treatment of pleural effusions by tapping. He was the first Chairman of the State Board of Health of Massachusetts. To his enthusiasm was largely due the high place which that Board took and has ever since maintained in the promotion of public health.

Calvin Ellis, 1865 to 1882, was faithful in all things, even in bachelorhood. To him medicine took the place of wife and child. He played a conspicuous part in the advance in medical education inaugurated by the Harvard School, and, dying, left his whole property to the School, the largest single benefaction for years before or after it was made.

Henry K. Oliver, 1868 to 1873, while an undergraduate at Cambridge saw the need of a medical friend for the students, and then and there resolved to provide for the need should it, ever be possible for him to do so. Unmarried, a simple life, diligence and self-denial enabled him to found the Professorship of Hygiene at Cambridge which fitly bears his name. May the Lord long preserve Roger I. Lee, first and present occupant of this chair, also Physician to our Hospital!

James C. White, successively Chemist, Physician to Out-patients, Visiting Physician, and from 1870 to 1903 Physician to the Department of Skin Diseases. He was a specialist evolved from the general practitioner; vigorous promoter of reform in medical education; a lusty and always fair fighter; a man of many interests and accurate knowledge in each. As a dermatologist he was equally eminent at home and abroad. He was President of the International Dermatological Congress when it met at New York in 1907.

Reginald H. Fitz, Pathologist and Physician, 1871 to 1908, was born into medicine just at the time that microscopic pathology was beginning its brilliant career. As a critic he had no superior. His masterly paper on "Perforating Inflammation of the Vermiform Appendix" was so convincing that it met with instant acceptance by the profession. He coined the word "appendicitis," of universal currency, as good in the household as in the hospital. Who can calculate the benign influence, past, present and future, of such work for humanity? Four years later he put forth a second classic on Pancreatitis, only less notable than that on appendicitis in that pancreatitis is a far less common disease, and less amenable, though not wholly rebellious, to treatment.

Walter James Dodd, Assistant Apothecary 1892 to '94; Apothecary and Photographer, '94 to 1900; then Roentgenologist to the Hospital until his death in 1916. In 1896 he began x-ray work. The danger of burns from the rays and the safeguards against them were not known in those early days. Whatever Dodd did he did with all his might, with no thought of self, and he was soon severely burned. Between this and 1916, when involvement of the lung proved fatal, the march of cancer was slow but inexorable. He underwent fifty operations and suffered grievous pain. Parallel with, but more rapidly than the disease, his knowledge advanced, and he became a recog-

nized expert in the use and interpretation of the rays. The most wonderful thing about him, however, was the dominance of his spirit. Stoicism is passive, and may have a sardonic tinge, more or less pronounced. Dodd's cheerfulness and zest in life were always on the surface. Almost as a bridegroom to his chamber he approached his death. A holy martyr of science, his story should be widely known and its lessons laid to heart.

Richard C. Cabot, Father of Hospital Social Service, is happily still with us, and has seen his child rapidly grow to maturity and travel 'round the world. Were I asked to name the three most conspicuous services which have been rendered humanity through the Massachusetts General Hospital, I should select Anesthesia, Appendicitis and Social Service.

All those whom I have mentioned were full professors in the Medical School, with two exceptions, and they had teaching positions. This fact is a tribute to the wisdom and prescience of Warren and Jackson. The Hospital and the Medical School are as interdependent as capital and labor. Some marriages are happy, others less so.

Lack of time compels me to pass over in silence many who are worthy of mention, whose quiet daily performance of duty, whose clear heads, warm hearts and deft fingers have helped to build up a priceless tradition. While the chief factor in the rank of a hospital is, of course, its professional staff, the services rendered by trustees, superintendents, nurses, and personnel imbued with and stimulated by the tradition and spirit of the institution, are not for a moment forgotten, nor do we forget the long procession of internes who have gone forth to all parts of the country bearing their torches high, and in their lives making fruitful the training in character and professional knowledge they here received. The children of the Hospital rise up and call her blessed.

It remains to speak all too briefly of one man, a physician, though never on the Hospital staff. I brave his displeasure but am sure of your approval. For years a Trustee, President of the Board, now President of the Corporation, he was a founder, long a Trustee, and President also of the Cambridge Hospital; member and Chairman of the State Board of Health, Chairman of the Water and Sewerage Board, Fellow of Harvard College, he has filled—I say filled advisedly—a rarely conspicuous place in this community in particular, and also in the nation at large. Happy is the people who can command such services! We are deeply, but cannot be too grateful to Henry Pickering Walcott. The wisdom of Solomon is a tradition; that of Walcott a living force. Only a few minutes remain to me to allude to the advance of medicine as contrasted with surgery in the last fifty years, especially. The

laity does not realize it, and we physicians are nothing if not modest.

Surgery is dramatic, leaves memorable scars on the person and sometimes on the purse. Painless surgery, born October 16th, 1846, was followed by safe surgery about 1870. The bounds of surgery were thus enormously enlarged.

The same discoveries which entailed safety in surgery laid bare the principles of preventive medicine. There is no such thing as preventive surgery. Surgery in its very nature is individual, a retail business. Preventive medicine is wholesale.

Until within, say, fifty years smallpox was the only preventable infection. Now, malaria, the plague, typhus and typhoid fevers, tuberculosis, diphtheria, cholera, tetanus, yellow fever, hook worm diseases, to mention only those best known, are practically largely, theoretically wholly preventable. The mastery of malaria and yellow fever conditioned the building of the Panama Canal. The French had the money and the engineering talent, but could not stand the loss of life. With the prevention of yellow fever the name of Walter Reed, army surgeon, will ever be linked. As citizens of the richest country in the world, we hang our heads in shame when we remember that after Reed's death the pension provided by a grateful—Heaven save the mark!—country was so inadequate for the modest support of his widow and children that a private subscription was raised.

Preventive medicine is yet in its infancy, but its benefits, humanitarian and economic, are today incalculable.

What the developments of the next hundred years may be it would be rash to try to predict. It seems, however, safe to say that cancer, the pneumonias, scarlet fever, pellagra, and perhaps influenza and other diseases will become subject to prevention and cure, and we can have full confidence that the Massachusetts General Hospital will enter on its third century as vigorous and full of achievement as she now enters on her second.

In presenting the next speaker, Dr. Walcott said:

I have often thought that we did not sufficiently appreciate the great courage with which John C. Warren ventured upon the great experiment of October 16, 1846. He was then approaching the end of his long and successful career and yet he put his reputation to the hazard of that experiment. Fortunately he won. But surgery is full of adventures. What to the public or to the medical profession seemed more hazardous than the search for disease in the very center of life and thought, the human brain! But the practised hand of

the surgeon, obedient to the guiding mind, discovered the disease and removed it.

The chief surgeon of the Brigham Hospital, Moseley Professor of Surgery, and some time officer in this hospital, can tell you all this and many other marvelous feats of modern surgery made possible by the discovery of anesthesia. Let me introduce Dr. Harvey Cushing.

THE PERSONALITY OF A HOSPITAL.

By HARVEY CUSHING, M.D., BOSTON.

AMONG those in attendance at the birth of Anaesthesia seventy-five years ago, was a mummy who played a useful part in the early history of this hospital and who might have said could his lips have been unsealed: "All these things are familiar to me, for I was a disciple of the great physician, I-em-hetep, of the third dynasty of the Pharaohs, four thousand years before your Hippocrates, and with me in Thebes were entombed medical papyri which some one may some day find. They will tell, as do our sculptures, that with instruments of copper we did just such operations as this, and quieted the patient with opium and hellebore, while the 'Black Art' gave us substances such as you do not seem to use, to put in our wounds to prevent putrefaction—and in our bodies too, after death, else mine would not be here. One thing, that has befallen many of my people I have escaped, for our mummified bodies since you began taking us from our tombs have often been ground to powder and used to heal the maimed and afflicted of these later times."

As human beings are pretty much alike inside, so are hospitals. In military parlance both "take in" and both "evacuate," and between these processes divers functions are performed, similar in all instances and of interest particularly to the physiologist on the one hand, and the hospital director or commanding officer on the other. They differ chiefly—both hospitals and human beings—in their external trappings, in their occupation and in their personality. Of these attributes it is with the last I propose to deal.

Raiment counts for little and the humblest may cover a personality capable of permanently influencing the motives, the ideals and actions of countless others. So also many of us have known hospitals under perishable and tattered canvas which possessed an individuality, character and spirit often found lacking in others encased in a more enduring shell of brick and mortar. Still, a covering of some kind is essential and though styles change for hospitals as for men, some which may be thought old-

fashioned will always possess a charm of association, and the "garb of stone and of that kind called Chelmsford granite" hammered out at the State Prison—"wrought with uncommon labour"—in accordance with the design supplied by Charles Bulfinch, was justly considered, a hundred years ago, to make of the Massachusetts General Hospital the handsomest edifice in the State. Well might John C. Warren and James Jackson together with the one thousand and forty-seven subscribers, whose great bounty made this famous institution possible, have felt pride in it then and have expected much from it for all time.

But however well infant or institution comes to be adorned, the essential thing is what handsome does, and with this, apparel has little to do—unless, indeed, so much attention is paid to habiliments that they are a handicap to freedom, affect personality in the individual and limit personnel to the institution. They may actually prove an encumbrance if in this world of competitive effort others laboring in their shirtsleeves are not to pass them by. So it is not the externals nor the inherited wealth, social position or occupation of an institution any more than of an individual which give it renown, it is the character of the service it performs—the quality more than the quantity of its work which enables it to establish and to maintain leadership. For as age creeps on and movement becomes hampered by joints encrusted with tradition, the more it feels the strain of competition.

But as hospitals go, the Massachusetts General for all its honorable century is young. One does not reckon the age of an institution in years so much as in adaptability to progress: nor, for the matter of that, human beings either, especially in a community noted for its progressive and public-spirited octogenarians. On the contrary, there is a tragic malady known as progeria or premature senility which renders inelastic both mind and tissue and brings old age to certain unfortunate institutions and human beings alike in their teens.

Age, after all, is a relative matter. A year ago the Brigham Hospital—a youthful upstart in this community—celebrated its eighth birthday. There happened to be staying with us at the time as my *locum tenens* an English surgeon representing a London hospital which was about to celebrate its eighth birthday. The essential difference lay in the fact that St. Bartholomew's hesitatingly reckons its birthdays in centuries, for it was eight hundred years ago when the jester Rahere, to fulfill the vow made to St. Bartholomew took holy orders and laid, just outside the wall of old London, the foundations of "Bart's" where, barely missed by the great fire, they still remain. Compared with that ancient hospital the Brigham is mewling in its nurse's arms and the Massachusetts General barely in knickerbockers.

How brief, indeed, have been its hundred years! There are still living today those who were born before that September 1st of 1821, when the first patient, a medical case, was admitted to the east wing of the old Bulfinch building. My own contemporaries go back an exact quarter of the way, to 1895-'6, when we were house pupils here, and Dr. Shattuck, beside me, goes back just half way, to 1871, when he first began to walk these wards already so familiar to his distinguished father before him. What we are to celebrate today, therefore, is the birthday of a hospital ten decades young, not old—a hospital which has not slipped back from the ideals and enthusiasms of its founders nor shown any tendency to become hidebound in the course of years by the very past which ennoble it. Fortunate it has been alike in its traditions and in those who have passed them on. For nearly the full century there has been a John Warren, the first of whom, like Clotho, began this hospital, and the second and third, like Lachesis, have done so much to keep the thread running smoothly from the spindle without a snarl. Except for the Bells and the four Munros of Edinburgh, possibly no community, certainly no hospital, has ever boasted such famous medical dynasties as ours with its Warrens, Jacksons, Bigelows, Shattucks and Cabots.

What are the elements that make a hospital what it comes to be as the years roll round? Given two institutions side by side in the same community with the same purpose, the same organization, the same initial endowment, and starting at the same time, differing only in their personnel how quickly, yet unconsciously, do they assume different characteristics and acquire differing personalities. Nothing should be more alike than two sister ships, yet in time how markedly different is the life aboard. How alike and yet how different are Andover and Exeter, twin offspring of a single brain; Harvard and Yale; Boston and New York; Massachusetts and Maryland. Each as an institution in which people combine for definite and similar objects has become a composite of many personalities—some dominant, some less so—all living or dead, nevertheless discernible however faintly in the ultimate picture.

So of each of us whatever our station may have been, who have passed happy days in this beloved place, there remains some record, and I like to feel that I can discern even after twenty-five years a faint imprint of myself and of my brother before me, shown in some trifling custom, or point of view regarding the making of observations or of recording them, or even the better pinning of a swathe or smoothing of a pillow. Obscured though one's personal record be in the composite of the hospital made up of the more enduring contributions of countless others, it nevertheless gives each of us who have been of the Massachusetts General Hospital a fractional right to speak on an occasion such as this in a somewhat intimate way.

A hospital may be likened to a hive. What gives it character is not its queen but its workers and producers. We and the hive are one'; and as in Kipling's story of Melissa and the Wax Moth, if softness and content enter in through the reactionary influence even of a single individual, the effectiveness of the whole society may be altered. Better the independent life of a solitary bee than the social life of a hive which comes to subsist on itself. It is from flowers outside that honey must be gathered. The best may be found in the hollow of an old tree and the most tasteless in a patent hive arranged for the Ohs! and Ahs! of exhibit, with all modern improvements in glass and tile. The Bee Master, like a proper hospital trustee, does not gauge productiveness on this basis. For a hospital must be something more than a well-kept boarding house for the indigent sick, and experience has long shown such a one too often becomes the plaything for politicians and a habitat for drones and weaklings.

Wise in their generation, the two founders of this great institution had very definite objects in view. It was eleven years before the event we are celebrating—the actual opening of the hospital—that they circulated among their fellow townsmen that celebrated letter inviting subscriptions for the foundation of a hospital as something other than an almshouse, one of the chief collateral advantages of which were the facilities it would offer as a training ground for students.*

Though an Almshouse and a public Dispensary were already in existence and the nebular beginnings of a university medical department had for some years been apparent on the Cambridge horizon, the project formulated by these two far-seeing young men, based on their experience abroad and set forth on August 20, 1810, may justly be regarded as the cornerstone not only of the Massachusetts General, but of the Harvard Medical School as well.

The story of the relationship of the original Massachusetts Medical College, as the old Mason Street School was called, both to university and to hospital is too long and complicated a one to enter into here, important though it is in the chronicles of both institutions. A tripod cannot balance long on both legs, much less on one. A university medical department built on a course of theoretical lectures without labora-

* Warren himself had had a three-years' first-hand knowledge of the leading European Hospital Schools. First at Guy's in its greatest years under the two Coopers, William and Sir Astley—the latter one of the foremost figures in our surgical annals. Then a year in Edinburgh for his degree, where in the old Royal Infirmary he learned to know bedside instruction given at its best. That infirmary, like the Massachusetts General Hospital, had been founded for this very purpose and with the traditions of Boerhaave brought home by the second Munro. Edinburgh had become the Mecca of medical students the world over. However, with the passing of Benjamin Bell and Alexander Munro its star was now waning, as a rival one arose in Paris, whence Warren betook himself for his this year of foreign study under Dubois, Corvisart and the great Dupuytren. Jackson, too, had passed nine months as surgical "dresser" at Guy's and St. Thomas' when these two hospitals were "united" and had a common school. An interest in Jenner's recent discovery of vaccination appears to have diverted him from surgery into medicine.

tories and a clinic can have no permanent stability. No more can an independent school or independent hospital. A university and a school without hospital connection, a school and a hospital without the academic influence of university connection, may perhaps for a longer time stand on two legs with the other in the air, but the position is insecure and easily toppled over by the first rival unless all three supports are firmly planted.

The two founders were university professors and judging from the pamphlet issued by them in 1824,[†] shortly after both school and hospital were in operation, it is evident that they considered the two to represent a teaching unit even though established under separate corporations. It would unquestionably have been better for permanent stability, as they doubtless foresaw, could the two institutions have been under one control or at least have had an interlocking directorate and have been geographically adjacent, for it was obviously their original purpose to open the wards to students.

Their pamphlet reads:

"The administration of public infirmaries very properly embraces a two-fold object—the relief of the sick, and the instruction of medical students. With a view to the promotion of both these ends, the Massachusetts Hospital, while it gives accommodation to the full extent of its means to the sick poor, gives also admission, which was at first conditional, but is now free, to the students of the medical class, attending the lectures of the physicians and surgeons. . . . Students are admitted to the patients to enable them to become practically conversant with the symptoms of disease and the operation and influence of medicinal agents."

Could anything have had a more modern sound than this statement? It lacks but one note—the third great function, indeed obligation, of a hospital, the advancement of knowledge embraced in that much abused term, "research." But Warren and Jackson, being men of imagination, were fully aware of the best means of encouraging the spirit of progress: namely, a convenient medium of publication. The old *New England Journal of Medicine and Surgery* (1812-1828) had already been started as the official organ of the embryonic medical department five years before the school was erected and nearly ten years before the hospital. But shortly after both were in running order this weekly magazine, as the *Boston Medical and Surgical Journal*, became the acknowledged mouthpiece of the combined institutions which, if not officially interlocked, were to all intents and purposes so, as the professors in the school were likewise the

appointees in the hospital. Indeed, the first page of each issue during 1828 actually carried a vignette of the Massachusetts General Hospital and in the first number it was expressly stated by the editors that "It is their intention to introduce the practice of the Massachusetts General Hospital, especially the surgical part whenever anything interesting occurs in it." Accordingly, to the widespread renown of both institutions, the early numbers of the publication were devoted to this object.*

What happened to check the fulfillment of their ideals I do not know. It is a matter which concerns the hospital's composite personality of which I am speaking. I fear that even Jackson and Warren, as time went on, became somewhat lukewarm in the matter of having students about except by sufferance, and came to feel with the trustees that the hospital could stand alone and was sufficient unto itself. When, in 1846, the North Grove Street School was contemplated and the hospital trustees were approached in regard to the matter, they replied to the letter from the professors of the medical school with courtesy but with indifference, stating that:

. . . in regard to the subject of building a Medical College in immediate proximity to the grounds of the Hospital, they cannot perceive any advantage to this institution to arise therefrom; but they think they can see that some disadvantages would be occasioned thereby.

True, students in a hospital, like children in a lodging house, are not an unmixed blessing, either to landlord or servant, and in those days the occasional Bob Sawyer and Ben Allen perhaps served to make the whole group seem rowdy and unruly. So when we were internes here, fifty years later, I think everyone, from staff to orderly, felt an aristocratic aloofness and indifference to all students except a favored few, an attitude which their body as a whole was quick to feel, and though a few lectures were still held in the old North Grove Street building, the school ere this had definitely abandoned its old site and had begun its migration southward to warmer climes.

It was a misfortune, I think, for both institutions, for though not an actual divorce it was an agreement to live apart, and despite its present geographical separation as close a tie as possible with the school in accordance

[†] See Account of the Medical School in Boston and of the Boston General Hospital, Boston, 1824, pp. 16.

* Nor did the founders stop here. Through the liberality of Ward Nicholas Boylston, student prizes were offered for the best medical dissertations. A student's society was established and the founder recommended preparatory studies to the students who should avail themselves of courses in natural philosophy (the biology of the day), botany, mineralogy, chemistry, the arts, belles lettres, ancient and modern languages, etc., in the university. Not until the end of the century with the opening of the Johns Hopkins Hospital and Medical School, when Osler supposedly for the first time in this country actually took the students into the wards and put them to work there and made them attend society meetings and publish their observations in a school organ of publications, was anything done for the advancement of medical teaching on better and more imaginative lines than those proposed by the founders of this institution whom we must recognize as men with a vision far ahead of their time.

with the views of the founders is something the Massachusetts General Hospital will surely do everything in its power to foster. But all hospitals differ more or less in their attitude towards students as they do in other matters. Each reflects the superimposed reactions of the succession of officials, who have made their composite personality what it is. Nor was the reaction of which I speak at all peculiar to the Massachusetts General, for it was even more strongly developed in the great hospitals in New York, in many of which students were actually barred from the wards, to the harm of both school and hospital. In London, on the other hand, after the closure of the famous Windmill School started by the Hunters, the hospitals like St. Mary's, St. Bartholomew's, and the united Guy's and St. Thomas's, took a school unto their very bosoms, for better or for worse, as an integral part of the hospital, and since then the student body, always present, has done much to color the life and affect the characters and keep the spirit of youth in these ancient foundations. And there is no question but that a hospital is safeguarded, so far as the care of its patients is concerned, if its attendants are under the constant fire and criticism of watchful students of the modern type who are the best possible stimulus to industry, to punctuality and thoroughness on the part of the senior workers.

It was not until 1861 that surgery came to predominate in the activities of the Massachusetts General, and though the excess number of surgical cases dropped off considerably, after the Civil War, they soon increased once more by leaps and bounds until in our days in the '90's the proportion of surgical to medical admissions was as five to three.* Nevertheless, from the beginning of its history—from that first operation on September 21, 1821, for prolapsus ani—surgery took a prominent place here, a circumstance, before the days of anaesthesia, due more to the professional eminence and the writings of Warren *primus* than to the number of surgical admissions.

Indeed, fewer surgeons than physicians were needed in those early days when, as a matter of fact, there was no great difference in the training of those whose tastes led them to practise surgery as well as physic and midwifery. Operations were few and far between and of no great variety, though of their kind they were doubtless done with a deftness, rapidity and aplomb no longer the fashion for surgery has ceased to be the spectacular occupation it once was.

For reasons somewhat difficult to understand unless it be that the ritual of the operating room is of more general interest than the pre-

scribing of drugs at the bedside, it has been the custom from the earliest days for hospitals to tabulate and publish lists of these performances. So in the first advertisement of the combined Massachusetts General Hospital and Massachusetts Medical College already quoted, there was given a list of "the important surgical cases and of Operations performed in the Massachusetts Hospital by the Professor of Anatomy and Surgery."

Of the few cases admitted during the last four months of 1821, six were regarded as sufficiently important to be included. One of them was a simple fracture, another a dislocation of the hip,† so that only four involved actual cutting operations. The first of these, on September 21st, as stated, was a simple ligation as for haemorrhoids. The second was "for the stone," and the graphic recital of the procedure ends with the ominous statement that the patient was "untied and carried to bed." The third, a few days later, was for popliteal aneurysm, the ligatures on the artery being left long, to "come away" which they unfortunately did not do, so they finally were cut short and the patient ultimately was sent home with a persisting sinus. The fourth operation was for fistula in ano.

The surgical treatment of these particular maladies reaches back as far as historical records permit us to go. Since the days when knights, weighted down by heavy armor, spent long hours in the saddle on the way to Palestine and back, the principles of treating ischio-rectal abscess and "the fistula" had been known, and in those days, indeed, the disorder was so common that there were specialists for it like the celebrated John of Arderne, who wrote a treatise on the subject in colloquial Latin in the year when Edward the Black Prince, "was taken to God." The operation of lithotomy, too, known to have been practised by the ancients, continued to be performed through the Middle Ages by itinerant "cutters for stone," just as cataract and hernia operations had been, and probably the skill and anatomical knowledge of John C. Warren was not greatly in excess of that finally acquired by the famous Franciscan lithotomist, Frère Jacques, three hundred years before. He it was who originated the lateral perineal operation

† The note of the preliminaries to "operation" in this case and its outcome read as follows:

"On the day of the admission of the patient—he was ordered to take Sulph. Magnes. oz. 1 Fol. sennae oz. 4ss—and to live light. The next day a warm bath was ordered. At 2 o'clock, he began taking Tart. Antidoms. gr.—every ten minutes—until the operation.—He took five grs. when vomiting was induced. At 3 o'clock, was bled to about 16 oz.—but no faintness was produced. The operation was then immediately proceeded with; and after continuing it about an hour, the case was abandoned as hopeless."

There is a sequel to this story. It concerns a malpractice suit which was dismissed because the jury disagreed. The man died forty years later, and J. Mason Warren having secured an examination, the specimen, showing a particularly rare form of dislocation which had not been recognized, remains to this day a feature of the Warren Museum. Patients often outlive their physicians, and a follow-up system—to the end—may overlap two generations.

* Dr. E. P. Joalin in 1899 prepared a chart published in that year's hospital report, in which the annual surgical and medical admissions from 1821 to 1899 were plotted. On the chart the introduction of ether barely shows. The war, and particularly antiseptics appear to have been the chief influence in the surgical evolution of the hospital.

with its "unerring thrust" and the removal of the calculus in a few seconds—fifty-four I believe was Cheselden's record in the century before Warren. The only one of these first four operations, therefore, which involved a relatively new principle, was that for aneurysm, which consisted in the ligation of the artery in the femoral canal well above the lesion—a procedure which had its origin in John Hunter's experiments of the century before.

During the second year twenty-one important surgical cases* were recorded, and in 1823 just twice as many, all of them, as before, with but few exceptions involving procedures whose origin is lost in antiquity. There were amputations (twice of the breast), circumcisions, operations for broken and necrosed bone, for cataract,* for haemorrhoids, for the removal of surface tumors. The only operation in this later list not known to history was performed on February 18, 1823, when Warren cut the facial nerve for *tic douloureux*, an evidence of the fact that the recent discoveries by Charles Bell and Majendie of the difference between motor and sensory nerves were yet to be fully interpreted. Naturally the pain was not relieved, and eight days later the inferior maxillary nerve was divided by trephining the jaw, a novel procedure at that time.† These nerve-dividing operations and the Hunterian ligation for aneurysm may be regarded, therefore, as the only operations with a relatively modern aspect in the entire list, and it is worth pointing out, that without experimentation on animals, we would not have known that aneurysm could be so treated with safety to the limb, and also, that without it we might be still as confused as Warren was regarding the function of the nerves of the face.

These things are mentioned as a contrast to the amazing transformation which surgery was destined to undergo through the two great discoveries of the century, one of which burst on the world full blown in its effectiveness in a single day in these very halls. The full significance of the other, which came thirty years later, really the more important of the two, was less easy to comprehend, and it made its way more slowly in the face of reactionary opposition.‡ For even though pain was abolished by anaesthesia during the immediate performance, surgery necessarily remained a last resort until the dangers and horrors of suppuration were eliminated. Despite the fortitude, resourcefulness and skill of those early surgeons,

* A large proportion of these operations (23 to 25) were ophthalmological, for surgery had not as yet become subdivided into its specialties.

† These and subsequent operations performed here for neuralgia formed the basis of Warren's inaugural article in the first number of the Boston Medical and Surgical Journal five years later.

‡ Röntgen's discovery near the end of the century should be mentioned as a third, for it has already enormously affected surgical procedures and, what is more, the x-ray now bids fair to become a substitute for the knife in the treatment of many conditions which have come to be regarded as surgical.

they were fighting an ambushed and, indeed, unimagined enemy; and the scene, the method and, alas, too often the outcome has been depicted in its imperishable pathos in such stories as that which tell of Alison Graeme and her devoted Rab.

Being a landmark in the history of medicine, naturally enough the culminating event of the century in the surgical history of this hospital was reached on October 16th, seventy-five years ago, when it was first demonstrated "that ether may be applied with safety, so as to produce insensibility during all surgical operations." So far as the Massachusetts Hospital is concerned, it has always seemed to me that it was of no consequence who discovered ether, who first learned of its anaesthetic qualities, who first made use of them to produce insensibility, who first conceived the idea that the drug might be utilized during major surgical procedures; for none of the central figures responsible for the subsequent unhappy controversy were in any way connected with the institution, nor, so far as is known, were ever within its walls till one of them, his secret drug in hand, made his way to the dome on that eventful October day of 1846. But the onlookers could have told you that it took something other than the chemical knowledge of Jackson and the practical ideas and imaginative powers of Morton to complete that scene, and this something was the courage of the man who ventured to permit the crucial public experiment on a human being, no less than that of Gilbert Abbott who submitted to it. Lost in the alteration over the discovery, too little stress has been laid on this important feature of the historic episode.

Can any surgeon here imagine what his reactions would be if an obscure dentist should come to him saying that he had a secret drug which would abolish all evidences of vitality necessary for the period not only of an operation but for wound healing as well; that it would be a great boon to humanity and would he please try it on his next patient? A drug producing these effects would be far less remarkable to us today than was the abolition of sensation under ether to our predecessors of seventy-five years ago. Warren assumed a great responsibility, and when it was over, his "Gentlemen, this is no humbug," if that is what he really said, must have been uttered with immeasurable relief. Patients have since been known to die under ether administered even by experienced hands. Suppose Gilbert Abbott with his trifling naevus of the neck and five-minute operation had succumbed to this strange gas.

But what robbed surgery of its terrors was not so much anaesthesia as Listerism, blessings to mankind as both have proved to be. Dexterity and speed were the essentials of operating before anaesthesia, and the momentary

agonies incidental to such operations as were undertaken, dulled as they were by alcohol or opium, were as nothing compared to the tragedy and suffering of the almost inevitable infection. It was not anaesthesia which opened the belly, the chest, the joints, and the head to the surgeon; it was the control of sepsis nigh forty years later.

Between these two great epochs in the history of medicine the outstanding figure in this hospital was that brilliant individualist, Henry J. Bigelow. He had just been appointed in his twenty-eighth year, as full surgeon. He was present at the first ether administration. He wrote the first paper on the subject of anaesthesia, and from that time until his retirement nearly forty years later, he became so increasingly dominant in the activities of the hospital that it came to take on largely the complexion of a surgical institute. To be sure, he had distinguished surgical contemporaries in Samuel Parkman and J. Mason Warren; while J. B. S. Jackson, Henry I. Bowditch, George Cheyne Shattuck, Jr., and, for a time, Oliver Wendell Holmes were his medical colleagues, but none of them have left their names so closely linked with the hospital, nor did any of them so enduringly stamp the place with their own personal hallmark.

Cheselden with St. Thomas's Hospital, Sir Astley Cooper and Guy's, Dupuytren and the Hôtel Dieu, Hunter and Brodie with St. George's, Pott, Abernathy and Paget with St. Bartholomew's, Robert Liston and University College, Lister and the Glasgow Royal Infirmary, just as in more recent times the elder Gross with the Jefferson Hospital, Horsley with Queen's Square and Halsted with the Johns Hopkins, so Henry J. Bigelow and the Massachusetts General are names the medical world will couple for all time. These examples come readily to mind, for the accomplishments of each of these outstanding figures has become merged with the institution which made their labors possible and in each case the institution has justly taken unto itself a large portion of the individual's reputation.

In days gone by it was an association more often established between hospitals and their visiting surgeons than with their physicians, and though there are many notable exceptions like Louis and La Pitié, Bright and Addison with Guy's, Stokes and Graves at the Meath Hospital in Dublin, nevertheless the contact seems less intimate even in these examples, and perhaps Osler's name coupled with the Johns Hopkins is the most outstanding example of what I have in mind among the list of our great physicians.

This is a thing which I think hospital trustees are prone to overlook—that the attendants must be encouraged in every way to merge themselves more completely with the institution, for this goes on forever, whereas they

are but creatures of the moment in its life. The hospital should not only hold itself responsible for the character of the work and protect the workers if necessary by insurance, but it should at the same time receive the chief credit for any outstanding and notable performance.

I do not mean to imply that such influences as this prevailed in Bigelow's time, but merely that they are the most favorable influences whereby something comparable may be encouraged to happen again. For Bigelow himself was unique—not the product of an environment. It is given to few men to establish what may be called a School of Surgery, and in his day his school was undoubtedly the foremost in the land. Even long after Bigelow had passed, when surgery had risen high on the wave of Listerism and was beginning to invade the body cavities, and even though our existing chiefs at the time, Porter, Warren, Homans and Beach; Richardson, Cabot, Mixter and Harrington, were men of unusual character and attainments, the Bigelow traditions still dominated and those of us who had never seen him nevertheless felt the influence of his commanding personality. For was not the very amphitheatre named for him, his famous chair still in use, his lithotrite to get out, and James Maina, peace to his ashes! to tell us with what éclat things once were properly done!

Bigelow's dominance in the composite personality of the hospital is all the more remarkable when one considers the eminence in the profession of his even more distinguished father before him, and of the physicians I have mentioned who were his contemporaries. But there will always be a larger supply of well trained physicians than of surgeons for a hospital to draw upon. To be acceptable, the physician requires a special combination of head and heart; the surgeon of head, heart and hand—a rarer combination which comes partly by gift and partly by training. I know of no better example of this combination at its best than my talented and lamented professor in the school, Maurice H. Richardson. In the days before Morton and before Pasteur and Lister, this disproportion in numbers between physicians and surgeons was even more true than now when it seems there may be successful surgeons with hands alone, and little heart and still less head—a dangerous kind of fellow to let loose in the community, either in or out of a hospital.

The antiseptic era came too late for Bigelow, for though the third Warren in 1870 after a visit with Lister in Glasgow brought back with him some rolls of carbolic lac plaster, the adoption of Lister's first principles made their way somewhat slowly, for there were none here who had been actually trained under the master. The carbolic spray of somewhat later

date was, I believe, first used by John Homans who according to report being not particularly pious, used to start his operations with "Gentlemen, let us spray."

Once introduced, however, antiseptics was equally hard to dislodge, and not until 1892 did C. A. Porter and Franklin Balch, as internes, purchase for the hospital its first Arnold sterilizer. Some years later, there still remained a crock of carbolic solution full of small sea sponges, used instead of gauze for sponging wounds except on special occasions; and I recall that our instruments of general use were still scalded rather than boiled and, what is more, after use were scrubbed, wiped and put away by the lowest house officer—a most certain way of shortening their period of usefulness.

During Bigelow's era the advances in surgery were largely along mechanical lines. There have been few surgeons who could see through a mechanical problem more clearly than he, and his inventive genius reached its highest mark, possibly, with the invention of his evacuator, to express the purpose of which the word, "litholapaxy," was coined. The pathological era which followed had its beginnings in the '70's, when it was brought home by Warren *tertius*, the first of the Massachusetts General Hospital surgeons to break away from traditions and get his training elsewhere than in the anatomical dissecting room. Versed in the new technique of section-cutting and staining, after two years in Vienna, a session with Cohnheim, then Virchow's assistant in Berlin, and another with Ranvier in Paris, Warren, on his return introduced here these new methods which have had such an important influence on the development of surgery. His studies on keloid, on the columnae adiposae, on the classification of tumors of the breast, together with his Surgical Pathology, made him the James Paget of this hospital, as Warren *primus* had been the John Hunter.

But this new learning which came from turning the microscope on disease, though first introduced by a surgeon, was not long to remain solely in the surgeons' hands. It was time for the hospital to have its own pathologist, and with the return of Fitz from abroad shortly after, the pathological building was erected and he was put in charge. Here, some fifteen years later, on a unique autopsy table devised by Bigelow, the underlying nature of the disorder which in time took surgeons out of the pelvis into the belly was finally disclosed and was designated "appendicitis." Anesthesia christened by Holmes, litholapaxy by Bigelow, appendicitis by Fitz, are three unquestioned offspring of the Massachusetts General Hospital whose names are enrolled in the baptismal register of medical terms.

But the long tradition of the anatomical dissecting room and surgery learned on the cadaver

could not be shaken off abruptly in favor of the experimental laboratory. John C. Warren it may be recalled, held the combined Chair of Anatomy and Surgery for thirty-two years, until the year after ether was first used, and though the chair was then divided, O. W. Holmes taking anatomy, for the next fifty years the anatomical demonstrators were held successively by Hodges, Cheever, Porter, Beach, Richardson, Mixter, Newell, Conant, Munro and Brooks, all but two of them surgeons with appointments here. The dissecting room without doubt was the best possible training ground until pathology and physiology became more essential than regional anatomy after surgery seriously invaded the body cavities and began to lop off the diseased appendix instead of arms and legs,* which, except in wars, we manage now better to preserve.

Up to our lights back in the '90's, surgery in its transition stage was done here exceptionally well, and there was a most healthy rivalry between the services, of which there were then three—East, West and South—each with its own distinctive personality. How looked down upon were we of the newly established "South" by those of the other services, each with its long and enviable genealogical list of internes scratched under the lid of the senior's desk. My brother I remember with amusement was shocked to find that I was not on the East side which had been his. But each of us felt his own service to be the best, and endeavored to make this assured by establishing traditions better, if possible, than those of the others. So with my contemporaries of the short-lived "South" I look back with an enduring sense of obligation to our three chiefs—to that resolute and picturesque pioneer John Homans, who twenty years before had been privately advised not to do ovariectomies here, yet persisted in so doing, to Jack Eliot with his brilliant gifts and uncanny surgical instinct, and to the youngest of them, William Conant, most generous and considerate of his hard working juniors. To place the time for a younger generation, we were just beginning to count the leucocytes in the blood, to operate for appendicitis in the interval, and hesitatingly to expose the gall-bladder through a small opening, for the upper abdomen was still largely a closed territory. Dr. Warren had just brought back from Röntgen's laboratory a small tube about the size of a goose's egg, and with it Codman and I ground out on the old static machine the first faint x-ray picture of a hand ever taken here.

A good deal of it, to be sure, in the retrospect appears somewhat old-fashioned and we were misled in many ways. We operated too much

* In his Life of Lister, J. R. Godlee has recorded that in 1865 at the University College Hospital there were 200 operations performed, 40 being amputations. In 1912 there were 2000 operations, 18 being amputations.

by the clock; the wealth of material was utilized in no way except for added experience; cases were insufficiently studied before operation; our fracture dressings were so neat and laboriously made we would hesitate to take them down to see if all was well beneath; we disdained the students, forgetting how recently we had been of them; there was rather too much display and operative rivalry of our Saturday morning public exhibition of skill; too much of the week's hard work was postponed for a prolonged Sunday morning visit which left us with no day of relaxation; there was no spur whatever to productiveness, no encouragement to follow up a bad result, whether to its home or to the dead-house.

But these things were merely an expression of the times: they were not peculiar to this hospital alone, and if they were faults, we juniors who revelled in the life and its opportunities, were unaware of the fact. We controlled the staff, in our estimation, who by sufrage did such operations as we allowed, and the Almighty with our help cared for the patients afterward, and usually got them well. And the trustees! If they existed, we saw them not, though aware that they made all those wonderful things possible. They, we felt sure, were only interested in the cost of a bed and its occupant per diem, not why it was that Martha survived her operation while Mary didn't; that Patrick's hernia recurred while Michael's didn't—not how these things might be done better, but only in the numbers of Marthas and Patricks and others the hospital took in and evacuated each year. They were the Bee Masters, we the Workers, and it is little to be wondered at, therefore, that to us as to successive generations of house officers, the orderlies, the nurses, the servants and minor officials continuously here were what, even more than the staff, according to our view, gave personality to the hospital.

Opportunity was in our grasp. Each could add something if he would. Had not Herbert Moffitt just left the most perfect set of records as a standard for all to copy; was not Richard Cabot at work with a microscope in the small laboratory, engaged in that mysterious occupation called research? Was it not possible for any other of us to do something original, to leave some imprint of ourselves on the old place, to add our mite which would be remembered by others to come forward and perhaps unconsciously influence them?

Who could have been that marvellous though anonymous scribe who a century ago penned those wonderful case histories in the first volumes of hospital records in the Treadwell Library and which remain an example to all house officers, for they have never been excelled.* It would make for some historian an interesting study to trace in these and subse-

quent volumes the records of the generations of what have always been called "house pupils" and to see in how far the promise of their future life as there recorded came to be fulfilled. It would be interesting to learn in how far their failures as well as their successes are attributable to the encouragement or repressions which this succession of young men in their formative years received at the hands of the Massachusetts General Hospital—whether it is because of the character of their training or in spite of it, success, and of what kind, has come to them. Here lies opportunity for another kind of an end-result study, of interest and importance.

As I look back on those of my own generation it seems to me that there have been three outstanding contributions for which the hospital may take credit. One of them is represented by the writings of Mumford, who more than anyone who has served here since "The Autocrat," possessed a gifted pen. And though his essays cannot be claimed by us, that experience which enabled him to write the best surgical text-book of his day was purely received here. It was through his highly developed histrionic sense, furthermore, that Dr. Warren's suggestion that these Ether Day anniversaries was taken up and developed. Then, also, the credit of two great reforms belongs to our generation, both of which are identified with the Massachusetts General Hospital. They both concern the after-result of the patient's hospital sojourn. With the name of Richard Cabot one will be forever linked, and it stands, I think, as the most significant accomplishment in the whole history of the hospital—more even than the introduction of anaesthesia, for in this case the idea, the man, and the fulfillment belong indissolubly to the institution. The other great reform, though of a different nature and launched with a different purpose, nevertheless also has its important sociological bearings. In this case also the idea originated here, but the man, a modern Luther, nailed his proclamation to the church door, preferring this method or martyrdom to the more persuasive ways which an Erasmus would advocate. This involved, too, a question of personality. Nevertheless the idea as well as the man was a product of the Massachusetts General Hospital, and a great nation-wide movement has been started which is bringing hospital boards everywhere to see that they have obligations which not only concern numbers and cost of patients, but also of work performed and its outcome.

There are, indeed, ways open for every individual to make his personal contribution to the institution he serves, and in developing my theme I have been interested more in what those associated with the Massachusetts General Hospital have left here than in what they contributed to their profession beyond the hospital walls. Some of the surgeons have been inventive and have perfected new apparatus or in-

*Dr. A. J. G. Macroft, an exact writer, in his *Essay on the Chemical History and Medical Treatment of Calculous Disorders*, published in 1817, mentions that no great London hospital then kept any regular record of cases. (Norman Moore.)

struments; some, like the Warrens, have written important surgical treatises, and J. Mason Warren's "Surgical Observations," dedicated to the trustees is a work of high order, a Massachusetts General Hospital publication from cover to cover; some have originated novel surgical procedures, like the lamented Frank Hooper's operation for adenoids, or S. J. Mixer's oesophageal operations, or have worked out the underlying cause of some imperfectly understood disorder, as E. A. Codman did for subacromial bursitis; some, like C. B. Porter have influenced surgery less by the written word than by their example of technical skill and enthusiasm as clinical teachers; some have developed new fields of work leading towards specialization as did John Homans and Arthur Cabot; and almost all, without exception, have been such dextrous and resourceful operators that one may hardly single out an individual unless possibly Maurice Richardson may be taken to represent the Massachusetts General Hospital ideal of later days.

But it is on the personality rather than on the personal accomplishments of these surgeons and of others who have been connected with the hospital, that I would dwell, for it is their combined individualities rather than their individual contributions which in the end have produced that complex which we recognize as giving to the Hospital its particular flavor, tone and color. It is an intangible thing—this distinctive character of one hospital which makes it differ from others of its kind. Like an old wine, it has acquired a certain quality which only comes with age and a new institution cannot imitate, for it represents the fusion of the countless personalities of all those who have worked for it or in it, no matter how lowly—of a nurse or house officer or orderly, no less than of a trustee or superintendent or member of the staff.

I think the faithful Hugh McGee has the record for service, fifty years in fact, but James Mains with his Parkinsonian hands was the mainstay of the Bigelow amphitheatre for nearly as long. Then there was Barry, imitable mimic of surgeons who had gone before Pipper the night orderly, "Out-Patient" John, and Louis Brown, who first came a boy with osteomyelitis and died here thirty years later, from complications of his old malady; meanwhile, having become, as a photomicrographic expert, a most useful and loyal servant of the Hospital. Strongly represented too is the personality of that beloved Walter Dodd, who grew from an apothecary clerk to have charge of one of the first and best x-ray departments in the country and, like the soldier he was, stood by his gun in the service of the hospital to the end—doubly dead in that he died so young. All these are represented no less than, perhaps even more than, those of greater fame who were given more prominent

roles and received the plaudits, but gave far less time to the performance.

Nor need the list be so restricted, for women—many of them—have done their part, even Nellie and Ellen in the Flat, dear old Maggie the waitress, Bridget Gibbon in the laundry, who for thirty-four years has known better than any one else which of the surgeons and their pupils, East or West, was the least tidy. Then, too, there have been women higher up who for hours have stood wearily handing things to imperious and impatient surgeons, or have for so many years spent unselfish hours, like Miss McCrae, in giving nurses the distinctive stamp of the Massachusetts General Hospital Training School. A woman, indeed, with vision and opportunity, may even be one of the outstanding figures, as has been true of St. Thomas's Hospital, in whose annals Florence Nightingale shares the honors with, if she does not even outshine, such as Mead and Cheselden, whom Alexander Pope immortalized.

So let us remember that some one other than a visiting physician or surgeon may indelibly stamp his personality on the hospital he serves. In the old Blockly Hospital in Philadelphia, a tablet has been erected to Thomas Owen, who for some thirty years as head nurse of the men's medical floor was known to successive generations of attendants and residents, most of whom are forgotten or at least their association with that picturesque old hospital has been, while his will remain for all time. And why? Because he gave all that he had to the institution and it left him famous, whereas the others, a good many of them, used the old Philadelphia Hospital not infrequently for political or private ends and are buried in oblivion. Such a one as this Owen was Jim Skillen, originally a Massachusetts General Hospital ward tender, who came back here to die of an incurable malady after passing uncountable years as janitor of the Medical School. There he probably meant more to more students than did any individual teacher, for he at least knew us all by name and had very clear and forcefully expressed notions as to our individual worth, as well as to the worth of our many instructors.

Example has much to do with the perpetuation of traditions, especially when there is a succession of hero-worshipping and imitative juniors; and if a hospital's personality is, as I believe it to be, its chief asset, the thought should quicken the sense of responsibility of every one, be he trustee or lowly servant, for it is in the power of any individual to modify this quality. He who is willing to do something more than follow a prescribed routine and who merges himself most with the active indoor life of the institution, giving even at personal sacrifice the most time to the attainment of this end, is certain to be the best and longest remembered.

And here my theme must end. Every hospital recognizes more or less clearly its set obligations; what helps or hinders most in their fulfillment are the crystallized traditions which give an institution its particular individuality. In the development of this quality countless people, however unconsciously, have contributed—those whose charity has given comfort and peace of mind, as well as those whose professional skill has brought physical well-being to the maimed and sick; those who have brought the greatest sympathy and understanding to the problems of the young people here to learn; those who may never have come in special contact with either patients or students but, freed from the killing routine of the clinic, have applied themselves to the forwarding of knowledge; those who have managed the business affairs of the hospital and its relations to the outside world; those, too, who have made the beds, kept the books, answered the 'phone, cooked the food, done the wash, stoked the fires, scrubbed the floors, and killed the rat—in the Hospital Jack built.

Dr. Walecott then explained the dual relationship of the McLean Hospital and the Massachusetts General Hospital as follows:

There has been a certain amount of speculation in the mind of the public as to the relation of the McLean Hospital to the Massachusetts General Hospital. They are one and the same. The department for the care of the sick, owing to the fortunate act of the trustees, came into possession of one of the famous country seats in the vicinity of Boston. Few of the older people of this audience understand that the title "country seat" applies to that portion of Somerville now occupied by a collection of slaughter houses. The McLean Hospital, then the Asylum, remained in Somerville until driven out by the increasing occupation of the neighborhood, when it was removed to Waverley and then properly renamed the McLean Hospital.

The trustees were enabled therefore to open this hospital somewhat earlier than the department in Boston, the first patient being received in November, 1818.

The trustees in their search for a competent superintendent, were fortunate in finding in a country physician, Dr. Rufus Wyman, a well-educated man of superior intelligence and strength of character. Two illustrious physicians, his sons, later carried his work to an eminence equal to his own. Like the great physician, Pinel, he believed that the maniac should be treated with humanity. It is not my intention to repeat the sad story of the care of the insane that prevailed before that hospital opened. So much of it as may be necessary to a better understanding of the work of the hospital will be given you by Dr. C. Macfie Campbell, head of the Boston Psychopathic Hospital, Massachusetts' last contribution to the humane treatment of the insane.

HISTORY OF INSANITY DURING THE PAST CENTURY WITH SPECIAL REFERENCE TO THE McLEAN HOSPITAL.

By C. MACFIE CAMPBELL, M.D., WAVERLEY, MASS.

"FEAR walks up and down in the Jungle by day and by night," Kipling tells us, and fear still plays a large part in the life of civilized man. Pain and death throw their shadow over his happiness, and mankind eagerly welcomes each step of progress in the alleviation of pain and the struggle with death.

There are some forms of sickness, which may neither involve pain nor endanger life; but which many hold more in dread than in actual suffering or even death; I refer to those forms of sickness which touch the citadel of human reason, and which insidiously rob the individual of his social value. The issues raised by these disorders, so closely interwoven with other fundamental problems of humanity, have been confused by many cross-currents of human belief; our patients at different periods have been held to be inspired by God, possessed by devils, corrupted by sin. Only slowly have we come to the modern standpoint that a mental disorder is one form of sickness, that it is a biological problem. The problem, it is true, is one of great complexity, not always to be formulated in the simple categories of internal medicine, but in psychological terms which do justice to the high degree of organization of human nature. This view is far from being as yet thoroughly assimilated; the mediaeval attitude still persists beneath the twentieth century veneer. Few individuals refer frankly to the fact that a relative has a mental disorder; in the minds of many, insanity has still a stigma attached to it. In the conversation of educated men insanity is often referred to in jesting or contemptuous terms; even physicians may refer to patients suffering from these disorders in the current slang.

Whoever uses such current terms, to that extent is living in an earlier stage of culture; he helps to perpetuate a prejudice which has very serious consequences; he postpones the early recognition and treatment of these disorders, favors treatment in ill-equipped but unknown institutions, increases the distress of the relatives.

Up to the end of the eighteenth century the condition of the insane in all countries was deplorable; fear was the keynote of their treatment. They were outcasts not only from society, but from medical science; in the medical books superficial descriptions, naïve explanations, scholastic discussions abounded. The period of the French Revolution was the dawn of a new era for the insane. In 1792, Pinel, appointed physician at Bicêtre, struck the fetters off the insane patients, and when later transferred to the Salpêtrière, he instituted the same humane régime which he had found so

successful at Bicêtre. For the first time it was possible to study the symptoms of mental disorder itself, uncomplicated by the artefacts due to hideous neglect or abuse. The literature of clinical psychiatry may be said to begin with Pinel's "*Traité Médico-philosophique sur l'Aliénation Mentale*" (1801). The pupils of Pinel, foremost among them Esquirol, soon contributed an important body of clinical information; deserving of mention are Falret, Calmeil, Bayle.

Pinel did not know until 1798 that William Tuke had in 1792 established the York Retreat, an asylum where the insane were treated on the same humane principles which had inspired his own work in France, nor did Tuke know of the work of Pinel till 1806. A great impetus was given to the humane treatment of the insane in England when Hill, in association with Charlesworth, introduced the same system into the Lincoln Asylum, the success of which system was further confirmed on a large scale by Connolly at Hanwell Asylum, where he went in 1839. Non-restraint soon became a dogma in the English public asylums, while it was still regarded with suspicion on the Continent.

In Germany, Reil had, in 1803, published his "*Rhapsodies on the Psychic Treatment of Insanity*," in which he denounced existing abuses in Germany. The important period of German psychiatric literature begins with Griesinger's "*Pathology and Therapy of Mental Disorders*" (1845); in this work the study of mental disorders is placed on the same basis as the other medical disciplines.

American psychiatric literature of this period consists of the work published by Benjamin Rush in 1812, "*Medical Inquiries and Observations upon the Diseases of the Mind*;" the fine spirit of Tuke or Pinel does not breathe in the work of Rush, and as a clinical exposition it ranks far below that of Pinel.

The facilities for the care of the insane in the United States during this period was very limited; in 1754 the Pennsylvania Hospital for the insane was instituted with custodial aims; Virginia, in 1773, opened a hospital for the insane at Williamsburg; the Society of the New York Hospital in 1809 built a separate building for the insane which developed into the Bloomingdale Asylum. The Society of Friends opened an asylum at Frankford, Pennsylvania, in 1817. In 1824, the Connecticut Retreat for the Insane at Hartford was opened under the enlightened guidance of Dr. Eli Todd. It was 1832 before Massachusetts built her first State Hospital at Worcester. New York State followed with the Utica State Hospital built in 1843. Such were the hospital facilities for the insane in the United States during the period of the early history of the McLean Asylum.

In America, the interest of the public in the distressing condition of the insane at the be-

ginning of the nineteenth century may be judged by the fact that out of the \$93,969 subscribed during a week's canvass for the establishment of the Massachusetts General Hospital, \$43,997.47 was subscribed specifically for the asylum. The branch for the insane, to which the name McLean Asylum was later given, was opened in 1818, three years before the opening of the General Hospital. "The first patient was admitted October 6, 1818, a young man whose father thought him possessed of the devil, which he had tried to exorcise with the rod."

A public institution for the management and care of the insane was a novelty; the public had to be reassured and educated to realize that the old traditions, associated with the care of the insane, were altogether broken with; it was unlikely that for some time the early and most curable cases of mental disorder would be brought to the asylum. As a matter of fact, probably at no period in the history of the McLean Asylum was there such a large proportion of difficult and trying patients as during the first years; it received a larger proportion than ever since of patients from jails and almshouses, where they had had no proper care. Many of them, from years of neglect, had fallen into habits which made their care a matter of great difficulty. Later, as State Hospitals grew up and patients received earlier treatment, these products of human neglect became less numerous.

The institution had, first of all, to establish itself in the public confidence and give a practical demonstration of the care of the insane, which would place this branch of medicine on the same basis as the other branches. It was a great opportunity; an old dispensation was at an end, a new tradition had to be established. The choice of a superintendent for the asylum was most important. The trustees chose Dr. Rufus Wyman, and under his enlightened direction, the care of the insane was at once placed upon a basis thoroughly humane and of as high technical efficiency as the medical knowledge of the time admitted. Dr. Wyman was no psychiatrist in the modern sense of the term, he was a country doctor of good common-sense, with a local reputation for handling the mentally afflicted. For seventeen years he carried on his work at the McLean Asylum without a vacation—for not until 1873 was it recognized officially that the physician required a vacation—and his whole aim was the comfort, happiness and the care of his patients; he shared the intimacy of his family life with those patients able to benefit by it, while for those severe and disturbed cases, whose symptoms necessitated their removal from any association with a group, he spent much time in designing suitable accommodations, and surrounded their treatment with every precaution and safeguard. He designed buildings, he carefully chose the attendants, he

encouraged a great variety of occupations and diversions. He grouped the patients in the buildings in accordance with their symptoms and their varied needs, and, in his careful attention to detail, he saw that the stone floors of the rooms of the most disturbed patients should be suitably warmed. The attendants were chosen on the basis of their character, and to insure to the patients a reasonable permanence of the personnel, efforts were made to study the requirements of the attendants.

Occupational therapy plays an important rôle in a modern hospital, and Dr. Wyman fully realized the importance both of recreation and of occupation. It is pleasant to read in the hospital report for 1829 the items: Medicines, \$32.79; Diversions, \$1,089.68.

Dr. Wyman realized that he had not only to care for the patients but to relieve the distress of the relatives and to help to create an enlightened opinion with regard to insanity. "It is believed the public have much to learn respecting lunatics—that insanity is curable—that a few weeks or months are not sufficient for a reasonable trial, that absence from home is always indispensable—that whips and chains are forever banished from every well-regulated asylum for the insane." In his report for 1833 he says, "No person is ever allowed to strike a patient, even in self-defense." To twentieth century ears such a statement seems superfluous. We assume that from the time of Tuke and Pinel this has been the only possible attitude of the enlightened physician. We only give due credit to Dr. Wyman for his sensitiveness to human needs and broad humanity when we contrast his attitude with that of a more distinguished physician of the period, Benjamin Rush. Rush seemed to be insensitive to the miserable state of the insane in the Pennsylvania Asylum in Philadelphia. He accepted the coercion then in vogue. He apparently took it for granted that a whip was always available to punish an assault. Rush certainly protests against ever striking a patient, but with the ominous qualification, "a blow with the hand or a whip only in case of assault."

To sum up the main factors in the régime of Dr. Wyman: detailed attention to the care, comfort and cure of the patients, a serious attempt to organize the daily routine of the patient in accord with his or her daily needs, the careful choice of a nursing personnel and attention to their comfort, an express veto on attendants striking patients under any circumstances or using mechanical restraint to avoid the necessity of nursing care. The whole spirit is that of the modern psychopathic hospital; the latter, however, containing an elaborate apparatus of study and treatment which in Dr. Wyman's time was non-existent.

After a review of the accomplishment of the first superintendent of the McLean Asylum, one agrees with the Chairman of the Trustees

in the report of 1837 when he says, "Dr. Wyman laid the broad and deep foundation of the usefulness and reputation of the McLean Asylum."

Dr. Wyman continued to regret that owing to the financial situation, it was not possible to receive patients entirely free. It is true that many patients were received at a very low rate of board. It was only later that the finances of the Hospital enabled a certain number of patients to be admitted free. The condition of the insane poor at this time in the Commonwealth of Massachusetts was deplorable. It is not necessary to make your flesh creep by giving details. One may refer, however, to the words of the Memorial presented in 1843 to the Legislature of Massachusetts by Miss Dorothea Dix: "I proceed, Gentlemen, briefly to call your attention to the present state of the insane persons confined within this Commonwealth in cages, closets, cellars, stalls, pens; chained, naked, lashed into obedience." In the Memorial this terse summary is followed by the recital of more detailed facts.

A similar situation existed in New Hampshire, where Dr. Luther V. Bell, a country practitioner of great intelligence and resourcefulness, took up the cause of the insane, drew up a report for the Legislature on the subject, and followed this by a series of articles and addresses. After six years of agitation it was determined to establish in New Hampshire an asylum for the insane, and with the help of private benevolence this was finally done in 1842. It is interesting to note that this movement was bitterly opposed by many, who applied the term "fancy philanthropy" to the movement in this direction. At the present date there are other movements, dealing with the mental hygiene of the community, with regard to which kindred spirits may be tempted to apply the same term, but which may come to be accepted as a matter of course as fully as the responsibility of the State for the care of the insane.

In 1836 Dr. Bell was invited by the Trustees of the McLean Hospital to become Superintendent of the McLean Asylum, for Dr. Lee, the successor of Dr. Wyman, had died within a year of his appointment. The single report published by Dr. Lee is a striking document. In his brief period of office, he made a very definite contribution to the spirit of the institution. Occupation of useful type was to him the great therapeutic agent. Like his predecessor, he emphasized and defined the moral management of the patients. He was not satisfied with any perfunctory daily program nor occupation, merely for a selected few, but aimed to find some simple mechanical labor in which most patients could be engaged. With regard to the nursing personnel, his thought was "not with how small a number can we get along, but how many can be advantageously

employed!" "We will not continue any male or female attendant whom we cannot invite into our family, seat at our table, and with whom we could not confidently place our own wives, sisters and brothers. We do not consider their service as servile; they are the companions of the unfortunate; engaged in the same employments with ourselves, they shall command our friendship and respect." He laid stress on religious services, and 95 out of 136 patients voluntarily attended family worship. So much struck were the trustees with the principles and the practices of Dr. Lee that they requested his successor, Dr. Bell, to be guided by them.

Dr. Bell, however, needed no direction from others as to the spirit in which his work should be conducted. His record in New Hampshire had shown his humane standpoint with regard to the treatment of the insane. He had already published various communications dealing with scientific topics, on dietetics, on the external exploration of diseases, and on smallpox. For twenty years he directed the McLean Asylum, and during this period the number of patients steadily increased; in 1847 only two-thirds of all who applied could be admitted, notwithstanding the increased accommodation supplied by a number of new buildings. Dr. Bell not only continued to show the same humanity in the care of his patients as his predecessors, he devoted himself to the detailed study of the symptomatology of insanity and of the principles underlying its treatment. In the early days of the Asylum we find many references in the treatment of patients to bleeding, blisters, setons, cathartics. The frequent blood-letting was largely due to the tradition so enthusiastically endorsed by Benjamin Rush, who bled his eldest daughter when she was six weeks old (though prevention of the overdose of laudanum would have been a greater tribute to the care of the children) and one of his sons twice before he was two months old. There were few conditions in which a good blood-letting was not claimed by Rush to be of considerable value.

These traditions had, however, been considerably weakened, among others by Dr. Wyman and Dr. Todd. In 1841 Dr. Bell writes, "The practice of bleeding, violent purgations, emetics, vesicatories, and derivatives has passed away before the light of experience." Moral means are for Dr. Bell the essentials of treatment, while with regard to drugs, their cautious use is recommended and an attitude on the part of the physician of "a wise expectation."

Dr. Bell not only brought the care and treatment of the individual patient to the highest level, he made useful contributions to the literature of his chosen branch of medicine; the most important of these was his paper "On a Form of Disease resembling some advanced stages of mania and fever, but so contradistin-

guished from any ordinarily observed or described combination of symptoms, as to render it probable that it may be an overlooked and hitherto unrecorded malady" (*American Journal of Insanity*, October, 1849). In addition, he felt that physicians, who had specialized in diseases of the mind, had a certain responsibility for guiding public thought in relation to kindred topics. A wave of interest in Spiritualism was sweeping through the country, and Dr. Bell devoted some time to the study of these elusive phenomena. He made these investigations in an open-minded spirit, although by nature conservative and not inclined to take up lightly any innovations; "And so in relation to all the new doctrines of our own art, I may say I was and am an ultraconservative, as in religion I hold to the Scotch Presbyterianism of my ancestors, Rouse's version of the Psalms of David and all, and in politics am an old foggy Whig." He felt that his influence had been of some use in promoting a sober attitude on these heady topics. "I always supposed I did as much as any man in New England to put a stop to that gigantic epidemic by demonstrating that its facts were only those of old mesmerism itself, and that the mediums never told what the inquirer did not know before." He makes interesting remarks as to the relation of the phenomena to dissociation. He comes to the far-reaching conclusion "that it is no evidence that views, feelings, reflections, which we do not recognize as at all ours or which we may spurn as being our thoughts or sentiments, still may not have come out of our storehouse as they certainly do in states of dreaming or of aberration." In this sentence Dr. Bell emphasizes a psychological principle, the further elaboration of which has been one of the main tasks of modern psychopathology. The conclusion of Dr. Bell's life was a worthy sequel to a distinguished professional career. He had, owing to the condition of his health, resigned from his position in 1857. At the beginning of the Civil War, he applied for a commission. He shared the hardships of his regiment during the campaign, was at the battle of Bull Run, and finally died in camp, with the rank of brigade surgeon.

Already during the life of Dr. Bell the McLean Asylum was being unpleasantly squeezed by different railroads encroaching upon its grounds, and by 1871 it was decided to move the Hospital to a more suitable site.

In 1879 Dr. Edward Cowles was appointed Superintendent of the Asylum, and under his direction the McLean Asylum was transformed into the McLean Hospital, and in 1895 it received a different local habitation as well as a new name, being transferred from Somerville to the new site at Waverley. In changing the name of Asylum to Hospital, Dr. Cowles was making no mere verbal alteration to spare the susceptibilities of the public. Around every name

connected with this form of disorder there develops an incrustation, due to the precipitation from the public opinion of the time, a testimony to man's continued inhumanity to man. The term, asylum, however, was only appropriate for an institution, which offered a place of retreat to the handicapped and shipwrecked. The name may have been partly discredited, because in many places it suggested a place of retreat, not only for handicapped patients, but for handicapped physicians, who had found a secure refuge from the trials of the outside world.

Both on its structure and on its spirit, Dr. Cowles impressed the hospital characteristics. Bars were taken off some of the windows, doors were unlocked, the number of women nurses for male patients was increased, a feature which Dr. Tuke, on his visit, regarded with some doubt, and visitors were admitted freely to the patients. In the reports of the previous superintendents, it is interesting to note the emphasis that was laid upon the evil consequences of visits, which were obviously sternly discouraged.

In 1882 a training school for nurses was established, the first formally organized training school in a hospital for the insane. In changing the name of attendants to nurses, here again it was no verbal change. It was the symbol of the new emphasis on the real function, and in order to perfect that function suitable training was organized. In establishing this training school, Dr. Cowles made a very important contribution to the whole movement of mental hygiene, and to the development of public opinion. He raised the prestige of the work; he emphasized the fact that nursing the mentally sick is simply one technical branch of nursing, as psychiatry is one branch of medicine. As no physician can be considered adequately trained, who has merely been taught to look after diseases of organs, and not diseases of the personality, so no nurse can be looked upon as fully trained, who has been trained merely to nurse organs and systems, and who looks upon the disorders of the personality as negligible. The laboratory physician may find a career in his technical researches, which only occasionally bring him into contact with patients, but there is no room in the wards of a hospital for a laboratory and impersonal nurse, and the time is, I hope, at hand when every nurse will be required to spend a period of training in psychopathic wards. Dr. Cowles was one of the first to realize the importance of these principles.

He saw that progress in the study of mental disorders required the use of the most accurate methods supplied by the laboratories, and that merely descriptive psychiatry did not carry one far in relation to the underlying mechanisms of the different forms of psychosis. He established a pathological laboratory in

which the researches were not limited to pathological anatomy, but to an analysis of the disordered functions. Dr. Noyes was at first in charge, but was succeeded in 1896 by Dr. Hoch, who at McLean Hospital began that work on the analysis of the underlying personal factors in mental disease, which has done so much to influence recent psychiatric thought. A psychological analysis of somewhat different type was undertaken, when the laboratory of experimental psychology was opened by Dr. Franz in 1904. The careful researches of Dr. Franz were the first important contribution from America to a sound experimental psychopathology, and the researches carried on by his successor, Dr. Wells, applied the careful technique of the psychological laboratory to problems of the personality, intimately connected with mental disorders. Dr. Cowles was deeply impressed with the dynamic aspect of mental disorder, and not content with formulations of these dynamic factors in complex psychological terms, he wished to trace the disordered functions to the underlying physiological and biochemical factors. In 1900 Dr. Folin established at McLean Hospital the chemical laboratory in which for the next eight years he carried out painstaking and fundamental researches with regard to this aspect of mental disorders.

The buildings of the McLean Hospital, as we see them, are a monument to Dr. Cowles, but a still greater contribution to the subject, in which he was so interested, was the placing of the study of this subject on as high a basis as that of the other medical disciplines, and of organizing in the Hospital medical research in mental disorders in the spirit of modern medicine.

The period of one hundred years has seen the public attitude towards mental disorders gradually modified, so that at the end of the century the humane attitude towards patients with mental disorders is widely disseminated, although it may not be always thoroughly assimilated. The spirit of humanity characteristic of the work in the McLean Hospital is a continuation of that humane attitude which was established in the McLean Asylum at Somerville, from its first institution under the régime of Dr. Wyman. The medical treatment of the patients in the hospital, after emancipating itself from the earlier drastic methods, has followed the same principles which Dr. Bell enunciated, namely, a cautious use of medical remedies and "a wise expectation." In only a small group of mental cases, and these of organic nature, is there any specific treatment by drugs; drugs in mental disorders are chiefly used for palliative and symptomatic purposes. While in the moral management of cases of mental disorder, the value of occupation and diversion have been adequately stressed from the beginning of the history of the McLean Hospital, the careful ana-

lytical researches of Dr. Hoch, later continued at Bloomingdale Hospital, contributed a great deal to show that moral management or psychotherapy has got a very technical aspect. Dr. Hoch in many communications emphasized the fact that many apparently obscure mental upsets could be traced to very definite personal problems in the individual life, problems which could not be formulated in the simple terms of biochemistry nor in terms of a psychology dealing merely with reaction times and impersonal factors. In emphasizing the development of such disorders, and in estimating the emotional factors and the difficulty of the actual situation in each case, he contributed not only to the understanding of the individual patient, but indicated principles of treatment with important bearings on the question of the prevention of mental disorders. The advance made during the last century in medical thought with regard to mental disorders may be illustrated by a comparison of the naive formulations of Benjamin Rush with the careful analysis of a nervous or mental patient at the present day. The underlying causes of the individual case now are studied in the light of the general condition of the metabolism, the state of the various organs, the hereditary endowment, the balance of the instincts and emotions, the influence of past experiences, the stress and strain of the present situation. The search for underlying causes was much less keen in the time of Benjamin Rush; he wrote that one of the causes which tend to produce intellectual derangement "is the frequent and rapid transition of the mind from one subject to another. It is said booksellers have sometimes become deranged from this cause."

Medicine is an exigent mistress, never satisfied, always with new tasks, the fulfillment of one task leading to the development of many others. The constant straining forward brings fatigue and a certain longing for finality, and one can appreciate the attitude of the weary sailor among the lotus eaters.

"Let us alone. What pleasure can we have

To war with evil? Is there any peace
In ever climbing up the climbing wave?"

It is pleasant to rest and regard complacently the progress made. It is pleasant to review the disappearance of the gross inhumanity, the disappearance of offensive words which symbolized this inhumanity. It is pleasant to consider the asylum transformed into the hospital, and to think of all the apparatus of modern medicine being applied to deal with these most obscure diseases. The attitude of complacency, however, is dangerous, and we would have learned little from the spirit of predecessors like Wyman and Bell and Cowles, if we complacently accept our inheritance and do not rather in their spirit dedicate ourselves to the

tasks which are before us. Perhaps there is much to be done in the twentieth century in relation to mental disorders; our medical schools are in general hopelessly inadequate in their attention to this topic; the mediaeval attitude still lingers not only in the mind of the layman, but in the mind of the physician and of the nurse; mental medicine is one stage behind general medicine in its progress towards preventive activity; it has had too limited a conception of the functions of a hospital, considering it rather a place where only serious cases are received, than as the health center of a community from which radiates out knowledge with regard to the factors which tend to produce mental disorders and which social organization may help to modify. It may be that one hundred years from now a speaker, reviewing the progress of psychiatry, will see a great deal to criticize in our present day organization. In his enlightenment he may wonder that we could be blind to certain things in 1921, just as the blind spots of men like Benjamin Rush and others tend to astonish us. The physician of the twenty-first century may complacently regard the arrangements of that period as comfortably final, and look back on our halting arrangements in a maturely critical way. He may even criticize the language of the times and may find that some of our words have become as offensive to him as the term lunatic has become offensive to us. He may shudder when he reads that a sick man was "confined in an institution" when the patient was really admitted to a hospital. He may be astonished at the limitations of the twentieth century hospital, which in its general wards paid attention merely to the diseases of the patients, but paid little attention to the patients themselves. The indoor department of the twenty-first century hospital may be a comparatively minor factor in the general health organization, while the main hospital activity may be in the out-patient preventive department, radiating out into every regions of the community where help is needed; in the twenty-first century hospital, every patient coming for advice may have some attention paid to the personal aspect of the disorder, and a psychiatric survey of the case may be considered imperative. As we are surprised that the nineteenth century, although in general humane, enlightened, cultured, came by such slow steps to take up adequate responsibility for the insane poor, so may the twenty-first century regard us and our problems. There may be in the present community large numbers sadly handicapped by reason of mental difficulties, who find their way to no hospital, are recognized by none as sick and ailing, but to whom perhaps the twenty-first century will give comfort and technical advice.

After looking back, therefore, on the past progress, and being duly grateful to men like

Wyman, Bell and Cowles, who have left such a permanent imprint of their humanity and intelligence, it may be well to turn forward again and see whether contact with these minds has not rendered us more sensitive to some of the tasks which lie at our own door, but which we have singularly failed to notice.

The theme of the last speaker was gracefully brought before the meeting by Dr. Walcott in these words:

In the year 1810, when Jackson and Warren issued the appeal for a hospital, the country was slowly drifting into the War of 1812, when for the last time a foreign enemy took possession of part of the territory of the United States. Dr. Warren was the son of a distinguished surgeon of the Revolution and a life-long leader in the medical profession, yet neither in the appeal nor in any report of the trustees during the building of the hospital is there a hint of the possible idea of a medical service in time of war.

The quarrel with Mexico made little impression on this hospital, as it did upon New England generally.

In the great war, the Civil War, members of this hospital and men connected with it, gave their services to their country. But still there was not direct official relation between this hospital and the medical service of the Army.

In the World War, that which stands the greatest of all wars, a change came over the policies of the Americans, and for the first time the country entered the war with an adequate surgical and medical corps. In the beginning individuals connected with this hospital, as with other hospitals, had already crossed the Atlantic and taken a worthy part in the struggle on the other side of the seas carried on by the Allies. But the entering of our country into the war led the Superintendent of the hospital, Dr. Frederick A. Washburn, experienced in military matters, to suggest to the trustees the expediency of joining a military staff to the Medical Service of the United States in case of war. His idea was accepted.

In July, 1917, Base Hospital No. 6, an organization within the Massachusetts General Hospital, left Boston, and went into service near Bordeaux, France. A hospital was established there, conspicuous for its good management and maintenance. Every man connected with that organization did credit to himself and brought renown to this institution.

A large share of the credit for the preparation of the country for that war is due to our guest of today. His remarkable service in the American Expeditionary Forces received the highest distinction. I have the pleasure of introducing Major-General Merritte W. Ireland, Surgeon General of the Army.

THE PLACE OF THE CIVIL GENERAL HOSPITAL IN THE SCHEME OF MEDICAL PREPAREDNESS.

BY M. W. IRELAND,

Surgeon General, U. S. Army.

Three quarters of a century ago today happened the great event which we are gathered to celebrate and which Wier Mitchell, with characteristic felicity termed "The Conquest Over Pain." It is most appropriate that Ether Day should be marked by an annual celebration, and I am glad that the Medical Department of the Army has an opportunity to speak its gratitude for this beneficent gift which has done so much to allay the vast sum of human suffering which we are called upon to witness and to relieve as best we may.

I could not have brought myself to stand here, in the place of the great and gifted men who have, in past years, lent their eloquence to the celebration of this day, but for the fact that it gives me an opportunity to thank the Trustees of this great hospital for the fine public service which it rendered to the Army during the World War. A century has passed since the first patient was admitted to this hospital, and during that time our country has been engaged in five wars. The first, in 1812, secured for us the liberty of the seas. The second burst the bonds which would have held back the march of civilization to the Pacific. The third was the long and bloody operation which cut out the cancer of slavery from the vitals of our nation. The fourth rescued the fair islands of Cuba and Porto Rico, in which we had long and great and special interests, from the weak and cruel domination of Spain and awakened us to our long neglected responsibilities as a world power which have been so magnificently met in the World War. For this last and mightiest war, we are, as yet, too near it, and its ultimate results are too much shrouded in the mists of the future for me to undertake to name them in a phrase.

The Massachusetts General Hospital is a civic institution which was founded and nourished by the generosity of your citizens of former days for benevolent and humane purposes which have nothing to do with war. It has, therefore, in these former wars, sat at home like a good mother, attentive to the duties of its house, sending forth, it is true, its children to serve their country and care for its armies, and, like a good mother, welcoming them when they return with the laurels of duty well performed. It has also never failed to open its doors to the sick and wounded soldiers. But in the last great conflict war laid its rude hands on every department of human activity and on the persons or products or entire populations, mobilizing nations for its own terrible purposes in a

way that had never before been dreamed of. In mobilizing the medical profession for war, we went further than to call the children of the great medical institutions to come, one by one, to be incorporated into the medical service.

The horticulturists, when they find a fruit tree which produces a specially valuable and delicious fruit, do not take the time to reproduce it by the slow process of raising new plants from the seed. This, which is nature's process, has, in addition to the disadvantage of delay, the uncertainty as to what may come from a seed in which many atavistic qualities are struggling to assert themselves. The gardener takes, instead, cuttings of the tree itself, which have the property of breeding true and continuing in the new plant all the admirable qualities of its parent.

Many months before our country entered the war, an officer of the Medical Corps of the Army, who had been charged with the organization of the activities of the Red Cross having relation to our military service, saw an opportunity to use the horticultural method and by cutting off bodily a military base hospital from the existing organizations of the great civil hospitals, to obtain a military unit which bred true to the parent stamp and carried into military life the noble traditions, the high professional standard, the cohesion, discipline and orderly methods of the parent institution. No provision for such ready made hospitals was contemplated by any law, but by the ingenious scheme of enrolling all of the personnel in the Army Reserve, these units were, by the act of calling them into service in time of war, lifted bodily from the Red Cross into the Medical Department of the Army. The Massachusetts General Hospital, by such an operation, furnished to the Army Base Hospital No. 6, which, organized and commanded by your distinguished Superintendent, Colonel F. A. Washburn, was among the first to join the A. E. F. in France, and created, in the suburbs of Bordeaux, a noble hospital which was a worthy daughter of this famous institution.

Base Hospital No. 6 found a home at Talence, a suburb of Bordeaux, in the buildings and fine park of the Petit Lycee, which was, however, already occupied by the French Hospital Complementary No. 25. The French military authorities agreed to close this hospital as soon as the sick could be evacuated, but this was not at all in accordance with the views and desires of the chef, an old French physician of Bordeaux, who thought that it would be far more agreeable to retain his position and command both hospitals. Here, however, he came in conflict with the will of the Commanding Officer of No. 6, which had something elemental and glacial in its slow, resistless, forward movement which gradually shaped every tenacious root and removed him and his hospital from the scene.

The French have a great reverence for trees, and appreciate, in a way that, unfortunately, most Americans do not, that these beautiful creations of nature are the gifts of the decades and of the centuries and cannot be made to order by the hand of men. Therefore they were not willing to give up their trees, even to the stern necessities of war, and stipulated with the American authorities that the trees should not be cut down in expanding the hospital by temporary buildings from its original 500 beds to more than 4,000, which it sheltered at the time of the Armistice. Accordingly the wards had to be placed here and there, wherever a sufficient space among the trees could be found and the ground plan of the hospital presented extraordinary outlines which resembled a Chinese ideograph rather than any architectural scheme. As the climate of France is rainy and its soil notoriously adhesive to the feet, the Commanding Officer provided corridors which would protect his nurses and patients from the rain and mud in the comings and goings between the wards and the administrative buildings. Lumber, however, was very scarce in France and most of the planks and beams from which our hospital centers were constructed were standing in the pine forests of the Landes when the American Expeditionary Force set sail for France. The General Staff was, therefore, constantly preaching economy in the use of lumber, and when several of them, in the spring of 1918, visited the sections of the S. O. S., and Bordeaux among them, to see how their injunctions as to economy and overcrowding were being carried out, they were scandalized to see these long and numerous corridors. "My God!" observed one of them, "the man is building a second Massachusetts General Hospital at Bordeaux." Little they knew how well these corridors would serve to accommodate the beds in the crisis expansion of the terrible October days when the crest of the epidemic of influenza coincided with the crest of the great wave of wounded which flowed back from the six weeks' battle in the Argonne and which strained the strength and resources of the Medical Department very nearly to the breaking point.

But at this time Colonel Washburn's transfer to England was ordered, where the hospitalization for American troops had been dragging and going badly and where the Chief Surgeon, who knew his value, felt a man of his qualifications and administrative ability was needed. There he remained, to be promoted later to the position of Chief Surgeon of the Base Section and the rank of colonel, to which the English Government added the decoration of the Order of St. Michael and St. George. Surely our government at no distant date will recognize the distinguished service of this officer.

I regret that I cannot go with some detail into the operations of the several departments

of this splendid hospital; the good work of Colonel Babcock, the next Commanding Officer; the medical service under Colonel R. C. Cabot; the surgical service under Colonel Lincoln Davis, and the fine nursing service under their admired leader, Miss Sarah D. Parsons. Suffice it to say that in their work they maintained the fine traditions of this great hospital. The cutting brought forth fruit true to stock. I did not know how Colonel Cabot would like transplantation into military atmosphere and, therefore, I was greatly pleased to hear him say, in a speech at a dinner in Paris, that he considered the practice of medicine in a base hospital to be ideal in its conditions for the attainment of the best results, as there all specialties were represented, all worked together without rivalry, without any intrusion of the spirit of gain for ends which were entirely noble, patriotism and the alleviation of human suffering.

As regards the laboratory service, I might mention, as something novel and interesting, that when a very fatal epidemic broke out in great Remount Depot at Souge which the veterinarians were not able to check, and which seriously depleted the supply of horses which were depended on to draw the cannon at the front, the Chief Surgeon of the Bordeaux section, Colonel Shaw, a graduate, by the way, of this hospital, took charge in person and took with him, from the laboratory section of No. 6, Drs. Moss and Binger as laboratory experts. Although they were not able to identify the causative organism, by the strict application of the well-known rules of epidemiology, they were able to bring the epidemic promptly to an end.

On January 14, 1919, Base Hospital No. 6 closed its records. The highest number of patients which it had sheltered at one time was 4,300. The number of cases received in the surgical service was more than 17,000, and 3,442 operations were performed. The total number of patients cared for in the hospital during the sixteen months that it was in operation was more than 26,000. On February 14, 1919, the staff and nurses set sail from Bordeaux and received a fitting welcome on their return home.

In speaking of the contributions of the Mass. General Hospital in the war, I should mention that Base Hospital No. 6 had a half-sister, Base Hospital No. 55, which, though not a cutting from the old tree, was raised from Mass. General seed, since Colonel Franklin A. Balch, who was the Chief of the Surgical Service, selected its entire surgical staff from the graduates of this institution, which contributed also its chief nurse and the majority of its nurses. The fortunes of war carried No. 55 to Toul, where it was nearly within sound of the guns and was

ready to receive the wounded from the great Argonne-Meuse battle.

Soon after its return I wrote to the Trustees to express my appreciation of the great service which the Base Hospital had rendered to our Army in France and to express the hope that so valuable a unit would not be allowed to die, but that its organization would be perpetuated by the constant taking in of new men and nurses so that, if, unfortunately, the time should again come when the country needed the help of this institution in war, we would find a living organization, enriched and strengthened by the traditions and memories of its former service, and so starting out with a credit balance of morale which it takes a new organization months of training and skillful work to build up. Morale is a word which we hear very often these days. I heard a story of a recruit, some months ago (when we were having recruits) who asked his sergeant what the word "morale" meant. Sergeant Hennessey, an old timer, replied, "Morale, me b'y, is something that we had in the old days but didn't have a name for it. Now we have a name for it and an officer to make it, but we haven't got it." Well, you have it here at the Massachusetts General and you understand how much of it is the reflex of the past, and the product of good traditions. The pride with which you keep this anniversary is an evidence of it. May I not suggest that among your anniversaries you choose one associated with the career of Base Hospital No. 6 when its members may meet together and cultivate a wholesome pride in their membership in an organization which represents the patriotic contribution of this hospital in the World War and which has so well maintained its best traditions!

The action of the Massachusetts General Hospital in giving to the Army Base Hospital No. 6 is the best answer as to the place of civil hospitals in our scheme of medical preparedness to meet a national emergency.

Dr. Walcott in closing, said:

Ladies and Gentlemen, we are greatly indebted to you for your attendance; we hope that you will understand better the needs of this hospital and the activities in which we are engaged, especially since these gentlemen have so ably presented our work.

ADDRESS OF DR. SAMUEL J. MIXTER.
— ALUMNI ASSOCIATION, MASSACHUSETTS GENERAL HOSPITAL.

Mr. Chairman, Members of the Massachusetts General Hospital Alumni Association, Ladies and Gentlemen:

It is my privilege and duty to present to the Hospital, on behalf of the Association, a tablet bearing the names of those members who gave their lives for their country and the world, in the late war. It is most fitting that this slight tribute to the memory of these, our brothers, should be unveiled on the day when we yearly recall the first demonstration in this hospital of the blessings of surgical anaesthesia, which has done so much to relieve human and animal suffering, and has rendered possible the greatest advances of modern surgical science, in the saving of life and health. These men whom we honor today have not only given their skill and knowledge, largely acquired within these walls, for us and for their brothers in arms, but they have given the greatest gift of all, their lives. While we honor their memories and mourn their loss, we are proud that their devotion and sacrifice are but typical of that spirit of service for which our old hospital stands, yes, for which the whole medical profession has always stood.

At the opening of the war the physicians of the country responded nobly to the call, and in spite of lack of military training and organization, performed their tasks well; let us hope that should the time ever come when they are again needed for such duty, which God forbid, the medical men will be so organized and with some ideas of their duties as possible members of an Army Medical Corps, that the trials and mistakes of the past war may be avoided. We are confident that, under able and judicious leadership, a Medical Reserve Corps will be formed that will be a credit and safeguard to the country.

During those terrible days of "Watchful waiting" when we, as a nation, were held back from helping those who were fighting our battles with the "Mad Beast" of Europe, many of our numbers crossed the seas to do what they could under other flags than our own, and the Massachusetts General Hospital, the first hospital in the country to establish a Unit, formed its Base Hospital No. 6. This unit was authorized by the Surgeon General in Feb. 1916, confirmed by the Trustees in March, and sailed on July 9, 1917. That our men and women were ready and willing to do their part is shown by the fact that serving with the United States or with the Allies during the war, there were of our Alumni, 223, with 5 deaths.

Staff, not Alumni, 38, with 1 death.

Nurses, female, 214, with 7 deaths.

Nurses, male, 16.

Employees, 19.

Total, 510.

To these are added those of the McLean Hospital, a part of the Massachusetts General Hospital Staff, 5.

Nurses, female, 26, plus 23 included in the Massachusetts General list.

Nurses, male, 24.

Employees, 20.—Total, 75. Complete total, 585.

The tablet in honor of the nurses who gave their lives is already on the wall of this room.

Is it to be wondered at that we who have served and loved the old hospital nearly all our lives, are proud of her. May she never lack able, patriotic men with knowledge, quick brains and skillful hands, to carry on her good work, and friends who are able and willing to supply the means that will enable her to live and grow.

These are the men who have honored us and to whom we pay our tribute of respect today:

Howard Walter Beal.

William Henry Buffum.

William Wright Walcott.

Harold Briggs Webster.

Ernest Victor Keller.

Walter James Dodd.

HOWARD WALTER BEAL.

Born November 26, 1869, at Bangor, Maine. Harvard Medical School, M. D., 1898.

Massachusetts General Hospital House Officer, South Surgical, 1899.

Practiced surgery in Worcester, and was on staff of Memorial Hospital, Worcester.

Married Henrietta Hobbs.

Military record: After leaving M. G. H., surgeon in the U. S. Army for nearly four years, first in transport service between N. Y., Porto Rico and Cuba, then in field and hospital in Philippines. Resigned June, 1903. Sailed with first Red Cross ship from this country in 1914. Chief surgeon American Women's War Hospital, Paignton, England. Early in 1915 returned to United States owing to ill health. Went overseas again when the United States went into war, as Major, M. C. Later consulting surgeon to First Division. While on duty near Montdidier received wounds on July 18, 1918, of which he died July 20, 1918.

We all remember this splendid, big fine man with a military carriage and a love for army life, a man who was ready and trained for military duty by his service in the Philippines, before the real summons came, who, not content to wait for an official call went to England with the first Red Cross ship and did splendid work there until illness forced his return to this country. From the time of his return until our entrance into the war, he lost no opportunity to impress upon the sluggish minds of his fellow countrymen, the need of preparedness for the inevitable conflict. He was mortally wounded by a bomb from an air plane on July 18, 1918. I have seen a letter from one of his fellow alumni, speaking of his mortal injuries and the little that could be done for him, and later we were told of his courage in the face of certain death. An abstract of the letter reads

as follows: "I operated the other night on Howard Beal, a very bad chest wound from a bomb, that I did under local anaesthesia, but it was too much for him and he passed out in almost twenty-four hours." An honor to his adopted city, where he did so much good work, to the army and to us all. Of his work in Worcester, his friend and colleague, Dr. Homer Gage writes:

"His professional skill, his industry, and his good judgment made him an exceedingly valuable man to the community and to the institutions which he faithfully served, but to all who had the privilege of enjoying his friendship, it was the character and personality of the man that can never be forgotten. His modesty and gentleness, his kindness, and eager willingness to do for others, made him always a delightful companion. His fine presence, charming manners, and a thoughtfulness that never lapsed, insured him a welcome in every circle. To these charms he added a keen interest in his profession, a great capacity for work, and a patience with details that peculiarly fitted him for the work in which he was most interested. As a colleague on the hospital staff, as a wise consultant, and as a faithful servant to his patients, he will be sadly missed; as a sincere and faithful friend and charming companion, he leaves a place that can never be filled in the memory of those who knew him best."

WILLIAM HENRY BUFFUM.

Born June 25, 1877, at Providence, R. I.

Graduate Brown University, 1898.

Harvard Medical School, 1902.

Massachusetts General Hospital, East Medical House Officer, 1902-1903.

Medical externe at Rhode Island Hospital, Out-Patient Department, 1903.

Visiting physician, Out-Patient Dept., Rhode Island Hospital for Diseases of Children, 1906.

Physician to clinical dept. for children affected by diseases of the digestive organs, Rhode Island Hospital, from 1912, to death.

Visiting staff of Providence Lying-in Hospital at time of death.

Married Edith Campbell, Nov. 1, 1904. She survived him with one son.

Military Record: Commissioned Lt. Senior Grade, M. C., U. S. N. Served with Navy Base Hospital No. 5. Died at Liverpool Eng., Oct. 13, 1918, of influenza-pneumonia.

A colleague writes: "William Henry Buffum may best be characterized as essentially dependable, well born, well educated, a gentleman. He was honest in his work, as a gentleman would be in all things. He had a scientific type of mind which demanded satisfactory proof, and his conclusions, given only after he was convinced, were soon found to be accurate and reliable. Buffum was never spectacular, he was always trustworthy, and from the beginning of his connection

with this hospital, to the day of his death, he remained to his friends the same steady, likeable and dependable fellow.

WILLIAM WRIGHT WALCOTT.

Born June 1, 1879, Natick, Mass.

Newton High School.

M. I. T., S. B., 1901.

Harvard Medical School, 1905.

Massachusetts General Hospital, South Surgical, 1905-1906.

Practiced in Natick, District Health Officer, Dept. of Health.

Not married.

Military Record: Medical officer of the First Corps of Cadets, M. V. M. Went overseas as First Lt., M. C., with the 101st Engineers. Made Capt., M.C., summer of 1918. He was in battles of Chateau Thierry, Chemin des Dames, St. Mihiel and Verdun. Wounded by shell and gassed but recovered. Died in France of military tuberculosis, March 16, 1919.

At about the time of finishing his service as House Officer at the hospital, Walcott was attacked by tuberculosis, and though he recovered and did splendid work the rest of his life, he was somewhat handicapped physically. His service to the community in which he lived was wonderfully fine, both as physician and health officer. After good work in the Army, having been gassed and wounded by shell, he apparently recovered only to die of acute tuberculosis in Paris, a victim to his devotion to duty and country.

HAROLD BRIGGS WEBSTER.

Born January 26, 1884.

Prepared for college at Noble and Greenoughs School.

Harvard College, A.B., 1905. Cum laude, Phi Beta Kappa.

Harvard Medical School, 1909. Alpha Omega Alpha.

Massachusetts General Hospital. East Surgical House Officer, July 15, 1909-Nov. 30, 1910.

Spent nearly three years with Dr. Grenfell in Newfoundland and Labrador.

In 1912, settled in Castine, Maine.

May 1, 1913, married Margaret Isabel Gleason, of Northampton, by whom he had three children, a boy and two girls.

MILITARY RECORD.

In Battery A, while in the Medical School, and later went to Plattsburg.

Commissioned First Lieutenant M. C. June, 1917.

Active service Fort Benjamin Harrison July, 1917.

Command of Ambulance Company No. 14.

November, 1917, Camp Greenleaf, Georgia, made Adjutant Ambulance Battalion.

Sailed overseas May 26, 1918.

Director of Ambulance with 4th Division.

Regimental Surgeon to 47th Regiment, August, 1918.

Promoted Captain July, 1917.

Promoted Major March 14, 1918.

Killed in action, Oct. 13, 1918, at Bois de Sept-sarges (near Cuisy sur Meuse).

An able man, strong in mind and body, he was one that made it his life's work to help "the other fellow," as was early shown by the work he did in Newfoundland and Labrador. A lover of country life and thoroughly appreciating the need of trained medical men in the smaller towns, he settled down in that most beautiful place, Castine, where he established a much needed hospital, again "for the other fellow," and lived a useful and happy life with his wife and little family till the call came. His promotion was a matter of course with his ability, all-round experience, and previous military training. He died, as he lived, helping "the other fellow," for he was killed by a shell while trying to push an ambulance out of the mud.

ERNEST VICTOR KELLER.

Born, Missouri, 1884.

M. D. Atlanta, Ga., School of Medicine, 1911.

Massachusetts General Hospital, House Officer Orthopedic Service, 1914.

MILITARY RECORD.

Commissioned in British Army, Lieutenant R. A. M. C., and was on duty on the Orthopedic Staff in Edinburgh War Hospital, Bangour, West Lothian, Scotland.

Commissioned Captain M. C. U. S. A., April 27, 1918. Loaned to the British army and continued service at the same hospital.

Returned to United States, March 30, 1919.

On duty U. S. General Hospital No. 6, Fort McPherson, Ga.

Later at Base Hospital, Camp Gordon, Ga., then again at No. 6, Fort McPherson.

Promoted Major M. C., Oct. 14, 1918.

Died June 3, 1919, at Fort McPherson.

Dr. R. B. Osgood, who knew Dr. Keller better than most of us, writes the following: Dr. Victor Keller was as much called to medicine as any apostle of the Faith. Born in the Middle West without financial resources back of him, he became early in his education determined to study medicine. He surmounted great difficulties, and became an expert telegraph operator. Later in life than most men think of entering the profession, he accumulated sufficient funds to put him through the medical school, and started on a career in Atlanta. He soon became attracted to orthopedic surgery, stimulated by Dr. Michael Hoke, by whom he was advised to come north and enter the Massachusetts General Hospital, which he did in 1914. As orthopedic House Officer he was acquisitive to a marked degree. He was meticulous in his care of the patients to

whom he endeared himself in a peculiar manner. His devotion to his work was untiring.

Many months before America entered the war, Keller was so stirred by the world cataclysm that, at a very large professional sacrifice, he responded to the call of Sir Robert Jones for American orthopedic surgeons to serve the British soldiers. Just started in the practice of orthopedic surgery in Atlanta, he packed his trunk and set off at his own expense, landing as a civilian on the Liverpool docks in 1917. Through the agency of Sir Robert Jones he received a commission in the British Army, and reported at the Edinburgh War Hospital. The hospital was large—three thousand beds. A man of Keller's attainments was just what the wounded men were crying for, and forthwith he was put in charge of a large service.

I quote from a personal tribute of a British surgeon closely associated with Keller in his work at the Bangor Hospital.

"It was not long before his qualities as a man and a surgeon endeared him to all his colleagues and associates. The British Tommy whose good fortune landed him in Keller's wards always expressed his wholehearted confidence in the 'American Doctor.' To hear the Jocks sing his praises was something well worth hearing, and was Keller's reward for his unselfish devotion to duty. Keller's was an outstanding personality, and he was beloved by many of his friends in Scotland. I know more than one who shed a tear when the news of Vic Keller's death reached Auld Keekie."

Keller was later transferred to the American Expeditionary Forces and received well merited promotion to the rank of Lieutenant-Colonel.

WALTER JAMES DODD.

Born in London, April 22, 1869.

Came to America when ten years old, attended the public school for a few years; then went to work to earn his own living. Attended Harvard Medical School for one year, 1900. Later he went to the Medical School of the University of Vermont, where he received his degree in 1908.

In 1909 he was appointed Instructor in Roentgenology at the Harvard Medical School, which appointment he retained to the time of his death in December, 1916.

Massachusetts General Hospital Record: Appointed Assistant Apothecary in 1892; appointed Apothecary in 1896; appointed Roentgenologist in 1908.

Married Margaret Lea, 1910.

Military Record: Sailed with First Harvard Surgical Unit on June 26, 1915; remained until October, 1915, rendering invaluable service as roentgenologist, working directly with the surgeon. Rank: Lieutenant R. A. M. C.

Walter James Dodd never was a House Officer in the hospital, yet he was so much a part of it and of us that this tablet would not be

complete without his name. Some of us remember him when his pleasant face appeared in the Apothecaries' room in 1892. He was a man with whom one did not have to "make friends," he was a friend from the start. Skillful, kind, ingenious, accurate and willing, he was from the first of the greatest help to the Staff and the hospital. His skill in photography made the case records more complete than they had ever been before, and added much to their value. We all know of his pioneer work with the X-Ray, and how much it meant to medicine and surgery, and we also know how he paid for his wonderful success by his sufferings and too early death. His work in the army was superb, and, knowing as we do his physical handicaps, it seems as though he accomplished the impossible. He entered the service knowing that his days were few, and, with certain death staring him in the face, he made the most of them. To have had the privilege of knowing him and loving him, was a joy and an honor.

Mr. Chairman, in the name of the Alumni Association, I present this tablet to the Hospital. May it stand in future years as a tribute to those whose names are here recorded, and also as a symbol of what the Hospital stands for—Service—Service to Country, Service to fellow men, Service to duty. There is no geographical limit to that service. It calls to the home, the hospital, the laboratory, the school the world over. It calls to the frozen north, to the pestilential jungles of the tropics, to the bloody fields of France, to Serbia, China, Africa, God knows where, and the sons of the Massachusetts General have ever answered that call and devoted their lives to that service willingly and faithfully. Each name graven in this stone carries a Golden Star, the Golden Star that signifies the supreme sacrifice in the service of the Nation that these men loved and died to save.

DR. S. J. MIXTER.

October 18, 1921.

ACCEPTANCE OF MEMORIAL TABLET.

By GEORGE WIGGLESWORTH, Esq.,
Chairman of the Board of Trustees of the Massachusetts General Hospital.

Dr. Mixter and Members of the Alumni Association:

In accepting this Memorial Tablet, the Hospital feels that it is receiving a gift whose influence will be felt through the coming time. It has been said that a surgeon should be actuated by pity as a motive, not as an emotion. Herein lies a truth which is at the foundation of all that is noblest in the medical profession. Back of all the skill and knowledge of surgeon, physician or nurse, must be the ideal of service and self-sacrifice. The nobility of the

profession is in its consecration to the relief of suffering humanity. If this ideal did not exist in the community, hospitals would never be established, and if this same feeling were not the basis of the work done within the hospital, the workers there would never attain the best results. It is this spirit, this ideal, which has been nobly shown in the lives of those whose memorial you have today here established. Carlyle has said that everywhere in life the true question is not what we gain but what we do. These men have offered their all to duty. We may say of them in the words of Milton, "Faithful hath been your warfare, and of God accepted, fearless in his righteous cause." The tablet not only honors them, but will be an incentive and an inspiration to others. The Hospital gratefully accepts your gift with a full realization of all it symbolizes and means, and will preserve it as one of the Hospital's sacred and inspiring possessions.

MEDICAL NOTES.

WORCESTER NORTH DISTRICT MEDICAL SOCIETY.

—The second quarterly meeting of the Fay Club of Fitchburg, Mass., was held at 4 P.M., Tuesday, October 25, 1921. Speaker: Dr. Andrew R. MacAusland of Boston; subject, "The Diagnosis and Treatment of Chronic Joint Conditions."

BIRTH CONTROL.—Plans are being made for the First American Birth Control Conference in the Hotel Plaza, New York, November 11-13, prox. Following this conference it is proposed to establish clinics in states where there are no laws prohibiting this propaganda.

UNDER the will of Hiram F. Mills of Hingham, Harvard University is remembered by a bequest of \$200,000, the income of which will be used for the investigation of the origin and cure of cancer.

DURING the week ending October 22, 1921, the number of deaths reported was 173 against 173 last year, with a rate of 11.91. There were 21 deaths under one year of age against 27 last year.

The number of cases of principal reportable diseases were: Diphtheria, 55; scarlet fever, 43; measles, 21; whooping cough, 7; typhoid fever, 10; tuberculosis, 26.

Included in the above were the following cases of non-residents: Diphtheria, 4; scarlet fever, 2; tuberculosis, 2.

Total deaths from these diseases were: Diphtheria, 3; typhoid fever, 1; tuberculosis, 14.

Included in the above was the following case of non-resident: Diphtheria, 1.

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The Journal does not hold itself responsible for statements made by any contributor.

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ETHER DAY AT THE MASSACHUSETTS GENERAL HOSPITAL.

ETHER DAY, observed this year on Tuesday, the eighteenth of October, had for those interested in the Massachusetts General Hospital a double significance. Its observance marked both the seventy-fifth anniversary of the first public demonstration of full surgical anesthesia and the centennial of the opening of the hospital.

In the morning a clinic was held, consisting of brief talks upon some phases of scientific and clinical work now being done at the hospital.

The subjects presented were as follows:

MEDICAL PAPERS.

Anoxemia and the Therapeutic Use of Oxygen. Dr. Arlie V. Bock
Use of Quinidin in Heart Disease. Dr. Paul D. White
How Are the Sick Provided with Nursing Care? Miss Sally Johnson
Remarks on Liver Function. Dr. Chester M. Jones
On the Increasing Prevalence of Body Ring Worm. Dr. Arthur M. Greenwood
Neuro-psychiatry in Medical Wards. Dr. Stanley Cobb

SURGICAL PAPERS.

Skeletal Traction. Dr. George A. Leland, Jr.
Traumatic Shock—Some Experimental Work on Cross Circulation. Dr. Monroe A. McIver
The Results of the Use of the X-ray for the Reduction of the Size of the Tonsils.

Dr. A. S. MacMillan
Discussion of a Case of Stenosis of the LARYNX.
Dr. Harold G. Tobey

Gonococcus Infection of the Kidney, with Case Report. Dr. J. Dellinger Barney
The Brackett Operation for Ununited Fractures of the Neck of the Femur. Dr. Philip D. Wilson
Fracture of the Humerus. Dr. Z. B. Adams
Bone Grafts. Dr. Lloyd T. Brown.

At 12.30, the Alumni Association of the hospital presented to the trustees a Memorial Tablet, placed in the Treadwell Library to commemorate those members of the Association who had died in the service of their country during the late war.

The tablet bears the following names and inscription:

Major Howard Walter Beal, M.C., U.S.A.
Lieut. William Henry Buffum, M.C., U.S.A.
Capt. William Wright Walcott, M.C., U.S.A.
Major Harrison Briggs Webster, M.C., U.S.A.
Major Ernest Victor Keller, M.C., U.S.A.
Lieut. Walter James Dodd, M.C., U.S.A.

These brave and devoted men, members of the Alumni Association of this hospital, died in their youth or prime for the honor of their profession and their country and for the universal cause of liberty, justice and goodwill among men.

Dr. Samuel Mixter unveiled the tablet and made the presentation.

At three o'clock in the afternoon, short addresses were made by Dr. Henry P. Walcott, President of the Corporation; Major-General Merritt W. Ireland, U. S. A.; Dr. Frederick C. Shattuck, Dr. Harvey Cushing and Dr. C. Macfie Campbell. These addresses will be found upon other pages in this number of the JOURNAL.

These exercises mark the close of a hundred years of achievement, a hundred years filled with devoted service to individual patients and to scientific progress.

Excellent in its workmanship, unselfish in its direction, the century of service rendered by the Massachusetts General Hospital, not only to Boston, but to all New England, stands as a record worthy of commemoration.

SEMI-CENTENNIAL OF AMERICAN PUBLIC HEALTH ASSOCIATION.

In preparation for Health Fortnight to be held in New York from November 8th to 19th, when will occur the most comprehensive Health Institute ever conducted in this country, the Fiftieth Annual Meeting of the American Public Health Association, and the largest Health Exposition ever undertaken in America, men and women prominent in public health work have accepted positions as chairmen and have begun to organize committees to handle the manifold details incident to the celebration.

Dr. Lee K. Frankel, former President of the American Public Health Association, is General Chairman of the Semi-Centennial Commit-

tee. Other committees and their chairmen are as follows: Entertainment, Dr. C. J. Hatfield; Women's, Miss Sally Lucas Jean; Banquet, Dr. W. F. Snow; Reception, Dr. Hermann M. Biggs; Exposition, Dr. Royal S. Copeland; Public Lectures, Dr. Eugene Lyman Fisk; Publicity, Victor F. Ridder; Information, Mr. Homer Folks.

The Health Institute, from November 8th to 11th, will offer to visitors from all parts of the North American Continent as well as from overseas, an opportunity to witness in actual operation every phase of health work conducted in this city. There will be more than forty demonstrations.

The Institute is sponsored by the American Public Health Association, the Health Department of the City of New York, the New York State Department of Health, the United States Public Health Service, the National Health Council and the Committee on Public Health of the New York Academy of Medicine, with the cooperation of approximately one hundred other organizations. The Chairman of the Committee is Dr. W. A. Evans, and the Director of the Institute is Dr. D. B. Armstrong of the National Health Council.

Sunday, November 13th, will be Health Sunday, and the cooperation of the leading churches is expected in bringing the message of health to the people.

Beginning Monday, November 14th, the week will be devoted to the Fiftieth Annual Meeting of the American Public Health Association at the Hotel Astor and to the Public Health Exposition in the Grand Central Palace.

To attend the meetings, prominent scientists will journey to New York to read papers reflecting the most recent results of their research and observation.

The committee in charge of the Public Health Exposition consists of Dr. Royal S. Copeland, Health Commissioner of New York City, as Chairman; A. W. Hedrich, Secretary, and Dr. Charles E. North, Treasurer and Director.

In all the various activities of Health Fortnight a participant will be Dr. Stephen Smith, who is in his ninety-ninth year and who founded the American Public Health Association. He conducted the investigations of sanitary conditions in New York more than half a century ago, with the result that legislation was enacted creating the Health Department. Dr. Smith was the first Health Commissioner of New York City.

A banquet will be tendered Dr. Smith by his fellow sanitarians, and he will be presented with a medal bearing his portrait.

COÖPERATIVE DEMONSTRATION WORK IN RURAL SANITATION IN MASSACHUSETTS FOR 1921.

THE Public Health Service and the Treasury Department of the United States approved an appropriation of \$500,000 for special studies of and demonstration work in Rural Sanitation in the fiscal year 1921. Congress granted \$50,000.

In the Public Health Reports for October, the following statement appears: "In view of (1) the definitely determined need of sanitary improvements in our rural districts, (2) the lack of local health service approaching adequacy in our rural counties and towns generally, (3) the vital importance from local, state, and national standpoints of having promoted the interests of our food-producing rural sections, (4) the inter-relation of rural to urban health, and (5) the demonstrated effectiveness of the plan of rural sanitation work of the Public Health Service to stimulate the development and maintenance of well-balance, economical local health service, it seemed unfortunate that the appropriation made available was less than 10 per cent. of the amount necessary to enable the Federal Government to accept opportunities presenting at the beginning of the fiscal year through offers from state and local authorities, to enter into coöperation in due and reasonable proportion to develop demonstration projects in rural health work. Had the amount estimated, viz., \$500,000 been made available, the demonstration work could have been carried out on a sufficient scale to make a definite impression upon the general situation, and the eventual results in the promotion of rural health work, with the saving of lives and the prevention of costly sickness among the people of the United States, would have been more than tenfold those which were obtainable from the small investment made possible by the appropriation granted."

Together with a balance left over, \$50,997.42 was available for coöperative rural health work of the Public Health Service; \$31,460.82 was expended for coöperative projects in counties, and \$5,874.45 for administration supervision and studies of the problem of rural sanitation. Coöperative projects were carried out in thirty-eight counties in fifteen states. The states expended eight times as much as the national government. The Public Health Service contends that the appropriations stimulated municipal, county, state and civic organizations to greater appropriations and activities than would have occurred otherwise.

A part of the government appropriation for Massachusetts has been expended in the Cape Cod Health District, amounting to \$312.50. The county expended 669.67. These sums provided for two lectures with an attendance of 75. There were three sanitary inspections of private homes and six of schools. Three hundred and

RESEARCH CLUB OF HARVARD MEDICAL SCHOOL.—The meeting of the Research Club to be held at the Harvard Medical School Amphitheatre in Building A, at 12.30 o'clock on Friday, November 4, will be addressed by Professor W. B. Cannon on "Evidence for Nervous Control of Some Internal Secretions."

two food product places were inspected and 90 school children examined. Seventy-eight children were found to be defective. There were 102 laboratory examinations, two being found positive. Sixty-seven cases were quarantined. It is claimed that the benefits resulting appear to be definitely demonstrated and that wherever local whole time health service has been maintained sanitation progressed.

The activities of the national agencies in Massachusetts was the result of negotiations with the State Commission of Public Health. In the autumn of 1920 representatives of the Public Health Service and of the State Department of Public Health met the Boards of Health and Selectmen of the fourteen towns of Cape Cod and presented plans for a system of whole time health service. At the next town meetings held in 1921, ten of the fourteen towns were authorized by unanimous vote to enter into the combination. These ten towns constituted a health district. A health officer was engaged for whole time service and was appointed as health officer for each of the contributing towns. A sanitary inspector and a clerk were engaged as assistants. Several health nurses were supplied by civic organizations or separate towns. The budget appropriation for the entire year is \$5,100 by the towns and \$2,500 from the rural sanitation funds of the Public Health Service. This appropriation exceeds by a very little the expense of divided health work in previous years and it is felt that the results are very much more valuable.

This demonstration should be of value to other communities made up of small towns, and the details may be studied with profit.

This government function of instruction and direction is far more logical than the installation of national organizations that may take up these health functions and require compliance with regulations from without, for the people are usually ready to respond and develop interest in preventive medicine where the way is made plain, and individual and community interest developed.

REPORT OF HOSPITAL STAFF MEETINGS.

THE communication from Dr. Frederick A. Washburn, making public the purpose of the Massachusetts General Hospital to give information to the profession on subjects of interest, is most gratifying, for it demonstrates an ambition to make the hospital a training institution in the largest possible way. The other well-equipped hospitals have also notified the JOURNAL of a desire to carry out similar plans, and it now becomes the duty of the profession to exhibit a disposition to take advantage of the opportunities provided for the acquisition of knowledge pertaining to the important and advanced methods of diagnosis and treatment.

A busy practitioner can, in a given time, learn much more about modern medicine by attendance at clinical demonstrations and hearing medical discussions than by reading textbooks alone. Much medical literature is old before it gets to a reader. Work in a modern hospital is up to date. Good attendance will stimulate honorable rivalry among the hospitals in attempts to present valuable information.

PRESS REPORTS OF DR. PAVLOV'S DEATH INCORRECT.

It is a pleasure to report that Dr. Walter B. Cannon has received information that Dr. Ivan Pavlov, the Russian scientist, is alive. When it became known that Dr. Pavlov was in dire need of assistance, Dr. Cannon secured contributions amounting to about two thousand dollars and forwarded this amount to Dr. Pavlov. This contribution by scientists in this country is evidence of the spirit of brotherhood among those who are working for humanity.

Miscellany.

THE RED CROSS.

BOSTON METROPOLITAN CHAPTER has arranged for the annual roll call November 11 to 24 prox. The Red Cross is appealing for memberships and contributions. An effort is being made to secure material assistance from everyone. The Boston Metropolitan Chapter is concerned in the post-war problems. A large part of the work consists in assisting the disabled soldier and his family. Trained counsel and service is given each month to over 4,000 men who are handicapped in health by service during the World War.

The aim is to help the disabled army to maintain its morale so that each soldier may win his individual battle in ill-health, loneliness and discouragement, and be able to return to his work as a citizen.

Men in hospitals, victims of the World War, are often so worried by home troubles that they cannot gain. The Home Service relieves the man's mind by helping his family to solve the problems of sickness and separation.

In many cases of tuberculosis and mental trouble an understanding of the home and family surroundings of the patient is helpful to the doctor. The Home Service visitor, trained to know what the doctor wants, gets the information which helps him care for the patient.

The man who has any claim upon the Gov-

ernment can turn to the Home Service visitor for help in applying for compensation, appealing disallowed claims, securing reimbursement for medical treatment, arrears in pay, etc.

For Health.

Health education is extended through Home Hygiene and First Aid Courses in Schools, Teaching Centres and Health Centers. These courses enable young people and mothers to take charge of a sick-room where professional nursing is not necessary, and to do bandaging and apply tourniquets, in a way which has often resulted in saving life. The First Aid Courses, which include men, are supplemented by lessons in swimming and life saving.

Public Health is promoted through prenatal, maternity and baby care, also nutritional work and school and general community nursing. The Public Health Nurses take charge of Health Centers in coöperation with schools, societies and the home.

A Health Center is the headquarters of the public health work of a community. It associates health activities in a common understanding. It economizes effort by uniting independent health campaigns, such as those for the prevention of tuberculosis, venereal, mental and industrial diseases, and above all the campaign to conserve child life.

The Chapter has made possible the creation of the Boston Health League, uniting the principal health activities of Boston in a two-year demonstration of the Health Center idea.

For Children's Help to Children.

The Chapter has enrolled to date 183,000 school children to carry on many activities in "service" to others. Many of these Juniors are knitting stockings and sweaters, others are making garments for little refugees, and rag dolls which will gladden their hearts. The boys show their ingenuity by making wooden toys to be sent overseas to orphans who do not know the meaning of play. Juniors make paper toys for the children in hospitals who are too sick to hold anything heavier.

At Christmas, the Juniors distributed gifts to ex-service men in forty-five New England hospitals. They have given entertainments in various hospitals. They have made valentines for sick children. Juniors are becoming more proficient in their service by taking courses in Home Hygiene and in First Aid. The Juniors of this Chapter have raised, this year, nearly \$9,000 for educational relief abroad.

For Needy People in Europe.

Hospital supplies, refugee garments and knitted articles have been going overseas steadily since 1914. Just now the effort is to supply as much clothing as possible to the needy women and children of Central Europe and the Near East. Here also are made pajamas, sweaters, etc., for the disabled soldiers still in

our United States Public Health Hospitals, and surgical dressings for district nursing.

For the Sick and the Handicapped.

Free transportation is provided for the needy sick from their homes to the hospitals where they receive regularly the medical and surgical care and advice they could not otherwise have, and to carry nurses and social workers who aid the unfortunate sick in their homes. This work continues to increase daily.

In and near Boston there are more than 2,000 ex-service men in United States and Public Hospitals. They feel themselves forgotten; they need change of scene; they need to be taken to drive; they deserve sympathy and help. Motors are supplied—and more are needed—to let them know that we are thinking of them.

Volunteers are sought and placed in every sort of helpful work from full time down to an hour or two occasionally. Addressing envelopes, weighing babies, reading aloud, writing in Braille for the blind, acting as clinical secretary, teaching crocheting or dancing, are sample ministrations made possible through the Red Cross by means of the city's welfare organizations.

For People in Distress.

Ready for instant response to any call for aid in time of disaster, there is maintained a complete outfit of the articles needed for relief and care, including hospital and canteen equipments. The roster of workers, awaiting the call includes physicians, nurses and unprofessional people who have had experience in organizing forces and resources for rescue and restoration. Upon a moment's notice, there would be set in motion the equipment and the people to do what Boston did at Halifax, at Salem and, nearer home, at Chelsea—and do it with organized readiness.

THE AMERICAN RED CROSS "Child Health Exposition," which has been touring the larger cities of devastated France since May, closed its season this week at Valenciennes. During the past five months, it has "shown" for periods of two to three weeks in six French cities—Lille, Roubaix, Tourcoing, Cambrai, Douai, and Valenciennes, besides a month in Paris. The attendance at the Exposition has averaged about 5,000 persons daily.

Every feature in the rearing of children according to the soundest and most approved methods was shown in the exhibition. Several French and American organizations joined with the American Red Cross in providing the various specialized departments. The American Committee for Devastated France, the Bordeaux Training School for Nurses, the French Red Cross, and the Jardin des Enfants, were among the coöperating organizations.

Correspondence.

WHERE SHALL THE MASSACHUSETTS
MEDICAL SOCIETY MEET?

Mr. Editor:—

I am very much in favor of Dr. Max Baft's suggestion of holding the annual meetings of the Massachusetts Medical Society in Worcester. I also think Springfield, Northampton, Brockton, and other cities, including Fall River, would be very desirable places to hold our annual meetings. The meeting in Boston to my mind ought to be held once in five years.

I feel that a visit to these cities would create a great deal of enthusiasm, would bring the Bostonians and those of us nearby Bostonians out of our shells.

Such a meeting at Worcester would stimulate the Worcester Medical Society and give the men there a chance to show us something.

I am at least in favor of trying out the scheme and, if it works out well in the first instance, to encourage a second meeting in Springfield, Fall River or some other large city.

Very truly,

LEO T. MYLES.

Cambridge, October 7, 1921.

FRIENDLY ADVICE.

Mr. Editor:—

Tut, Tut! For the love of Mike, don't get all fussed up this way. You will ruin your digestion.

Have you something on your mind or haven't you lived long enough to learn that it is the soft answer that turneth away wrath, etc., etc.? Besides, don't you honestly believe that there may be a fraction of a per cent. of truth in what the gentleman says, a very, very tiny fraction, of course, not more than an S. P. T., as it were, yet still detectable by delicate reagents?

Why not take out the old sense of humor, dust her off a bit, and get her on the job? But don't keep her at it overtime, as does your esteemed contemp., the J. A. M. A.

Cordially yours,

J. H. MEANS.

Oct. 13th, '21.

[This refers to the criticism of the statement made in a daily paper quoting a certain speaker as follows: "I have said to you physicians at other meetings, and I will say to you again here, that your charges are so outrageously exorbitant that they are like sentencing the sick to death." This language tends to keep alive suspicion of the profession, and in the opinion of the Editor should be resented. Soft answers won't penetrate the minds of such speakers. We claimed that doctors as a class should be exempt from this sort of criticism, not the sharks and leeches.—EDW.]

DR. TALBOT'S COMMENT.

The following letter is the answer to Dr. Codman's note on Dr. Talbot's paper published October 6.

Dear Dr. Codman:—

Thank you most sincerely for your letter. I welcome your letter particularly as it raises one question to which I had difficulty in finding an answer. That is: Why do not such things as skin grafts and transplants of all tissues result in cancer?

My answer is this: In physiology the experiment is performed of cutting the heart muscle of a turtle into strips for the purpose of studying its contractile

reactions. Here is evidence that the sympathetic fibers contained in this section of tissue continue to function although severed from the organism. Hair and skin have been known to grow after death of the individual. This evidence would tend to show that any section of tissue must contain sufficient of the sympathetic nerve fibers plus ganglia to function for a time until the graft is connected up with the whole organism. In the picture of cancer which I wished to draw, it was the disassociation of the single germ cell with its inherent power of reproduction which was the essential factor.

Another question much more difficult of solution has arisen to my mind and it has led me to a conception so bold that I almost hesitate to put it in a personal letter.

If these germ cells are under the control of the sympathetic nerve system, why is it that they have not been seen and identified by histologists before now?

My utter ignorance in this minute subject leaves me in a purely speculative frame of mind. My first inclination was to lay it to those nerve fibers already known, such as those which go to the skin, but this does not fill the bill as regards the rest of the body.

My other conception is utterly without foundation so far as I know. However, I cannot free myself from the belief that possibly connective tissue may not be just the passive tissue we believe it to be and that it may be a part of the sympathetic nerve system.

Its reticular character with its intricate intermeshing, its existence in association with every tissue of the body so faithfully fulfills the need of the situation that I keep coming back to that idea.

How to go about testing such an idea is quite beyond me. Fibrous tissue is associated with all repair processes. Is this an endeavor of nature to prevent the disassociation of cells during the repair process? Is the fibrous tumor non-malignant because nature won the battle resulting in an overgrowth of nerve fibers?

Fantastic as it is, I must confess I still want to reserve my judgment as to its truth.

It has been a great pleasure to read your views and I shall appreciate it if you have any further comments to make.

Yours truly,

(Signed) JOHN E. TALBOT.

Officers of the Massachusetts Medical Society

1921—1922

Elected by the Council, May 31, 1921.

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MASSACHUSETTS GENERAL HOSPITAL STAFF MEETINGS.

Mr. Editor:—

The following is the general program for the Staff Meetings to be held at the Massachusetts General Hospital during the coming months. The date of the December meeting will be announced shortly.

November 7th,	Orthopedic
December,	Tropical Medicine
January 16th	Surgery
February 13th	Neurology
March 13th	Medical
April 10th	Dermatology

All of the above meetings will be held at 8.15 P.M., in the Lower Out-patient Amphitheatre.

It is the intention of the Hospital to preserve stenographic reports of all papers and discussions at these meetings and furnish the JOURNAL with an abstract of the proceedings.

The following is the program for meeting No. 1, to be held on November 7, at 8.15 P.M., in the Lower Out-patient Amphitheatre.

Presentation of Cases by House Staff (15 minutes).

Report of a Case of Strychnine Poisoning Treated by Intraspinal Injection of Magnesium Sulphate.

Discussion Dr. Elliott C. Cutler

Papers (20 minutes each).

Remarks on Congenital Dislocation of Hip and Bone Tuberculosis in France. Dr. Z. B. Adams

Scoliosis. Dr. Armin Klein

Ankylosing Operations on the Spine.

Dr. Lloyd Brown

Very truly yours,

F. A. WASHBURN, Resident Physician.

NOTICES.

MASSACHUSETTS GENERAL HOSPITAL.—A special demonstration on the subject of Cancer will be held in the Surgical Amphitheatre at 10 A.M., Friday, November 4th.

Dr. R. B. Greenough: The Control of Cancer. Discussion of Regional Cancer by Dr. White, Dr. Simmons, Dr. Greene, Dr. Porter, Dr. Jones, Dr. Greenough, Dr. Davis, Dr. Barney, Dr. Harmer and Dr. Holmes.

F. A. WASHBURN, M.D.,
Resident Physician.

THE NEW YORK ACADEMY OF MEDICINE.—A stated meeting was held Thursday evening, November 3, 1921, 8.30 o'clock, at 17 West Forty-third Street, New York City. The anniversary discourse, "A Layman's View of Medical Progress," was delivered by Henry S. Pritchett, M.D., of the Carnegie Foundation.

WORCESTER STATE HOSPITAL MEETINGS.—On the evening of October first, Dr. M. M. Jordan addressed the staff of the Worcester State Hospital. The subject of his talk was "The Relation of the Neuro-Psychiatrist to the State Hospital." Dr. Jordan's talk was very interesting and instructive.

These meetings hereafter are to be held twice a month and a number of speakers have been obtained to talk on various subjects.

I would like to report that Dr. Clarence A. Bonner has been appointed Assistant Superintendent at this hospital.

WILLIAM A. BRYAN, Superintendent.

Up to the present time the hospital work has been conducted in a building constructed as a dwelling house. While it is recognized that this is not the most favorable time for raising funds for building, the old structure has become so inadequate that it was decided to erect a wing that shall accommodate about 17 patients, with laboratory, x-ray rooms, etc. The main building will be finished at a later date. Provision for housing the nurses is to be made in a cottage in close proximity. Although Holden is a small town with no wealthy residents, there seems little doubt that the amount necessary will be forthcoming.

RECENT DEATH.

DR. MILTON HOWARD FUSSELL, Roxborough, Philadelphia, Medical Department of the University of Pennsylvania, 1884. A member of the teaching staff of the Medical Department of the University of Pennsylvania since 1884. Assistant Professor of Medicine, 1901-1911. Professor of Applied Therapeutics, 1911 until his death, which occurred suddenly on the morning of October 15. A member of the Association of American Physicians, the American Medical Association, the Pennsylvania State Medical Society, the College of Physicians of Philadelphia, the Philadelphia Pathological Society, the Philadelphia Pediatric Society and the Philadelphia County Medical Society, in whose activities he was a constant participant. He was also an active member of the boards of a number of medico-social and philanthropic agencies in Philadelphia and a member of the visiting staffs of the Memorial, the Episcopal, St. Timothy's and the Chestnut Hill Hospitals.

ADJOURNED MEETING OF THE COUNCIL.

An adjourned meeting of the Council will be held in John Ware Hall, Boston Medical Library, by vote of the Council, on Wednesday, November 9, 1921, at 12 o'clock, noon, to consider a report of a Committee on Malpractice Indemnity and Insurance, and any other business that legally may be brought before the meeting.

WALTER L. BURRAGE, Secretary.
Boston, November 2, 1921.

NEWS NOTES.

Dr. M. H. Walker, Jr., of Pittsfield, has recently been operated for appendicitis and is now convalescing at the House of Mercy Hospital in Pittsfield.

Dr. R. A. Woodruff of Pittsfield, while closing the door of his automobile, caught the end of the two middle fingers and badly crushed them. Although he is about at his work to some extent, he is suffering considerably from it.

SOCIETY NOTICE.

HAMPTON DISTRICT MEDICAL SOCIETY.—Special Cancer Week meeting, Springfield Academy of Medicine Rooms, November 2, 1921. Address by Dr. Robert B. Greenough, Boston.

Meeting for the general public, Central High School Hall, November 2, 8 P.M.

SPECIAL CANCER CLINICS.

Springfield Hospital, November 4, 10 A.M.

Mercy Hospital, November 1, 10 A.M.

Wesson Hospital, November 2, 10 A.M.

APPOINTMENT.

DR. WALTER D. BERRY of East Longmeadow, Mass., recently tendered his resignation as Passed Assistant Surgeon, U. S. P. H., at East Norfolk, Mass., to accept the superintendency of the Otter Tail County Sanatorium for Tuberculosis at Battle Lake, Minn.

A DRIVE FOR A FUND of \$25,000 is being conducted for the purpose of constructing a wing of the proposed new building for Holden Hospital, Holden, Mass., on land donated by Mr. Bertram S. Newell.